

GOVERNMENT OF INDIA

DEPARTMENT OF ARCHAEOLOGY

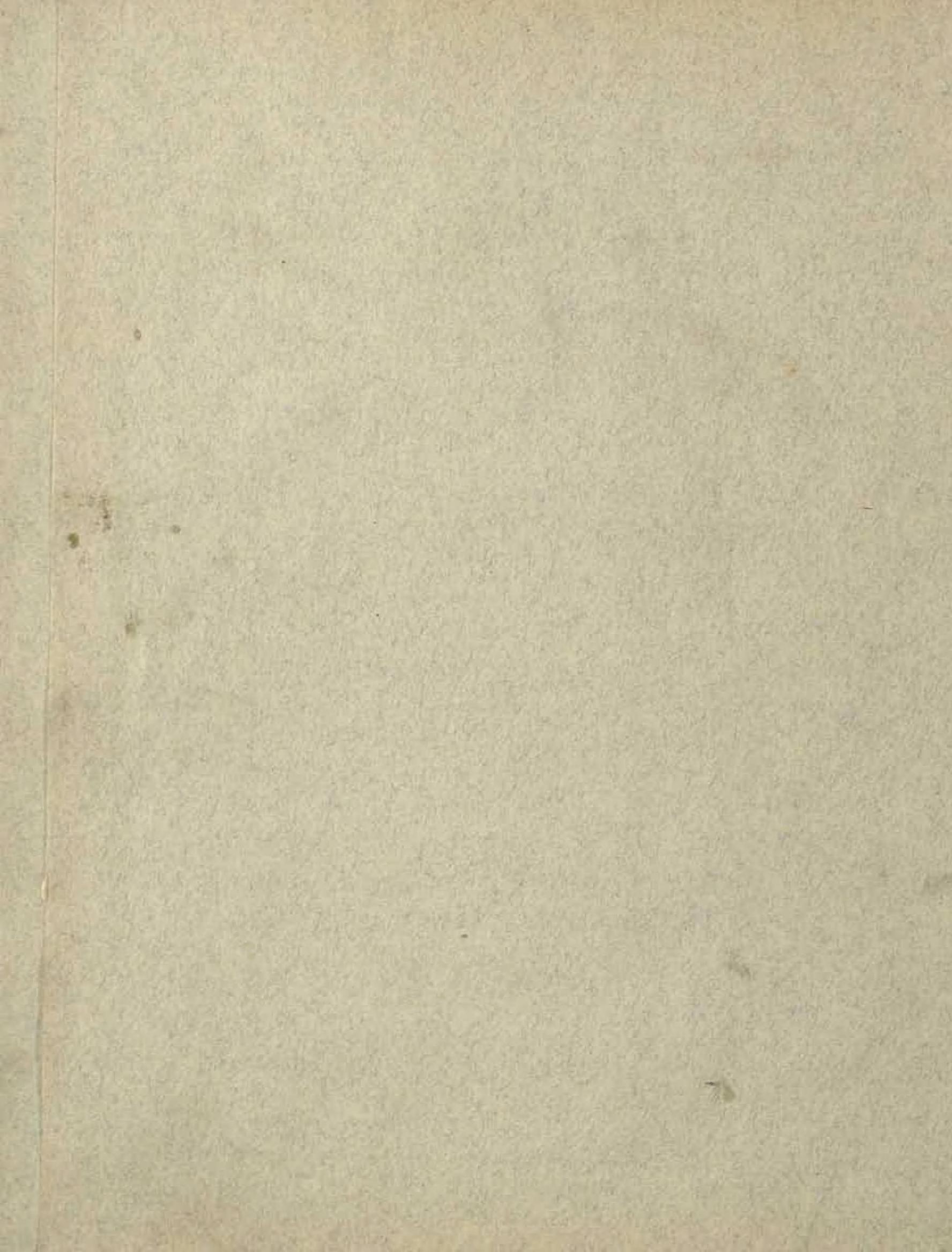
**CENTRAL ARCHAEOLOGICAL
LIBRARY**

ACCN. 21725

CALL NO. **R 913.02 I.D.A.-Ann**

D.G.A. 79.





ANNUAL REPORT

OF THE

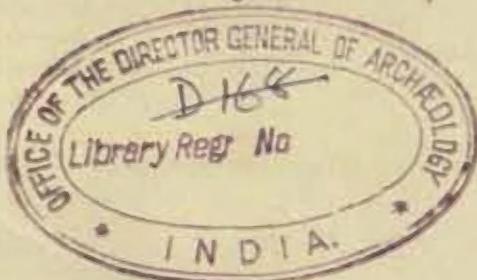
ARCHÆOLOGICAL SURVEY OF INDIA

PART I, 1915-16.

By

SIR JOHN MARSHALL, Kt., C.I.E., Litt.D., M.A., F.S.A.,
Hon. A. R. I. B. A., Vice-President of the India Society,
Director General of Archaeology in India.

21725



913.02
T.S.A. Ann
CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
1917

Price Rupees Two or Three shillings.

Agents for the Sale of Books Published by the
Superintendent of Government Printing, India, Calcutta.

IN EUROPE.

Constable & Co., 10, Orange Street, Leicester Square, London, W.C.
Kegan, Paul, Trench, Trübner & Co., 68-74, Carter Lane, E.C., and 25, Museum Street, London, W.C.
Bernard Quaritch, 11, Grafton Street, New Bond Street, London, W.
P. S. King & Sons, 2 & 4, Great Smith Street, Westminster, London, S.W.
H. S. King & Co., 65, Cornhill, E.C., and 9, Pall Mall, London, W.
Grindlay & Co., 54, Parliament Street, London, S.W.

Luzac & Co., 46, Great Russell Street, London, W.C.
W. Thacker & Co., 2, Creed Lane, London, E.C.
T. Fisher Unwin, Ltd., 1, Adelphi Terrace, London, W.C.
Wm. Wesley & Son, 28, Essex St., Strand, London.
B. H. Blackwell, 60 & 51, Broad Street, Oxford.
Deighton, Bell & Co., Ltd., Cambridge.
Oliver and Boyd, Tweeddale Court, Edinburgh.
E. Ponsonby, Ltd., 116, Grafton Street, Dublin.
Ernest Leroux, 28, Rue Bonaparte, Paris.
Martinus Nijhoff, The Hague, Holland.

IN INDIA AND CEYLON.

Thacker, Spink & Co., Calcutta and Simla.
Newman & Co., Calcutta.
R. Cambray & Co., Calcutta.
S. K. Lahiri & Co., Calcutta.
B. Banerjee & Co., Calcutta.
The Indian School Supply Depôt, 309, Bow Bazar Street, Calcutta, and 226, Nawabpur, Dacca.
Butterworth & Co. (India), Ltd., Calcutta.
Rai M. C. Sarker Bahadur and Sons, 75-1-1, Harrison Road, Calcutta.
The Weldon Library, 18-5, Chowinghee Road, Calcutta.
Standard Literature Co., Limited, Calcutta.
Lal Chand & Sons, Calcutta.
Higginbotham & Co., Madras.
V. Kalyanarama Iyer & Co., Madras.
G. A. Natesan & Co., Madras.
S. Murthy & Co., Madras.
Thompson & Co., Madras.
Temple & Co., Madras.
P. R. Rama Iyer & Co., Madras.
Vas & Co., Madras.
E. M. Gopalakrishna Kone, Madura.
Thacker & Co., Ltd., Bombay.
A. J. Cambridge & Co., Bombay.
D. B. Taraporewala, Sons & Co., Bombay.
Mrs. Radhabai Atmaram Sagoon, Bombay.
Sunder Pandurang, Bombay.

Gopal Narayan & Co., Bombay.
Ram Chandra Govind & Son, Kalbadevi, Bombay.
A. H. Wheeler & Co., Allahabad, Calcutta and Bombay.
N. B. Mathur, Sept., Nazir Kanun Hind Press, Allahabad.
Rai Sahib M. Gulab Singh & Sons, Mufid-i-Am Press, Lahore.
Rama Krishna & Sons, Lahore.
Supt., American Baptist Mission Press, Rangoon.
Manager, the "Hitavada," Nagpur.
S. C. Talukdar, Proprietor, Students & Co., Cooch Behar.
A. M. & J. Ferguson, Ceylon.
Manager, Educational Book Depots, Nagpur and Jubbulpore.*
Manager of the Imperial Book Depôt, 63, Chandney Chank Street, Delhi.*
Manager, "The Agra Medical Hall and Co-operative Association, Ltd." (Successors to A. John & Co., Agra).
Supt., Basel Mission Book and Tract Depository, Mangalore.*
P. Varadacharya & Co., Madras.*
H. Liddell, Printer, etc., 7, South Road, Allahabad.*
Ram Dayal Agarwala, 184, Katra, Allahabad.*
D. C. Anand & Sons, Peshawar.*
Manager, Newal Kishore Press, Lucknow.*

* Agents for the sale of Legislative Department publications only.

CENTRAL ARCHAEOLOGICAL

LIBRARY, NEW DELHI.

Acc. No. 21725.

Date 18. 10. 55.

Call No. 913 02/1. D. A. Anna

LIST OF PLATES.

PLATE I.—(a) Asoka column at Firoz-Shah's Kotila, Delhi ;
(b) The Hauz Khas, Delhi : during excavation of steps ;
(c) Mosque in Firoz-Shah's Kotila, Delhi ;
(d) Approach to Humayun's Tomb with Arab-Sarai gateway on the right.

" II.—(a) Bhalar Tope from S.-W. after repair of drum ;
(b) Deogarh : Kuraiya Bir Temple before repair ;
(c) Simhanada Lokesvara from Mahoba.

" III.—(a) Temple I at Surwaya, before conservation ;
(b) Temple I at Surwaya, after conservation ;
(c) Temple II at Surwaya, after conservation ;
(d) Hindu monastery at Surwaya, before conservation.

" IV.—(a) Mora Moradu : stucco reliefs on south side of Main Stupa ;
(b) Mora Moradu : monastery after excavation, from west ;
(c) Mora Moradu : monastery after excavation, from north ;
(d) Puranadhisthana : relief of Buddha's nativity.

" V.—(a) Mora Moradu : terracotta Buddha from Monastery ;
(b) Mora Moradu : votive stupa in Monastery ;
(c) Mathura : railing pillar from Kankali Tila well ;
(d) Mathura : inscribed stone-bowl from Pali Khera Tila ;
(e) Mathura : railing pillar from Gosna Tila.

A. h. 1850

Annual Report of the Director-General of Archaeology for the year 1915-16.

PART I.

BY the death on active service of Mr. Gordon Sanderson, Superintendent, Muhammadan and British Monuments, Northern Circle, the Archaeological Department has lost an officer of exceptional ability and one whose place cannot easily be filled. Mr. Sanderson was brought out from home as an Assistant Superintendent in the Eastern Circle in 1910, and within a few months was promoted to the Superintendentship at Agra, where he remained until he was transferred to the Indian Army in February, 1915. The many valuable articles which he contributed to my Annual Reports on the monuments at Agra, Lucknow and Delhi, and the several independent monographs which he also produced during the four short years of his service—including an admirable work on *Modern Indian Architecture*, a *Catalogue of the Delhi Darbar Loan Exhibition of antiquities* (for the collection of which he himself was mainly responsible) and a *Guide to the Delhi Fort*—all bear witness to his versatile talents, to his artistic genius, and to his unremitting energy. But it is the monuments themselves, and especially those in the neighbourhood of Delhi—the Fortress of Firoz Shah, the Purana Qila and the Qutb, on which he lavished so much skilful care—that testify most eloquently to the value of his achievements. In memory of Mr. Sanderson his friends propose to erect a sun-dial at the Qutb, to be placed within a square of cypresses on the green lawn in front of the enclave. “The shadows pass: the light remains!” It will be an appropriate memorial to the permanence of all that he accomplished in his life and by his death.

Death of Mr.
Gordon
Sanderson.

Another valued officer who also joined the Indian Army during the year under review and has since proceeded to the Western Front, is Mr. J. F. Blakiston, Assistant Superintendent in the Eastern Circle. As both Mr. Blakiston and the late Mr. Sanderson were trained architects and more especially concerned with the conservation of monuments—always the most important function of the Archaeological Department—it need hardly be said that their loss has involved a considerable increase of work for the less fortunate officers who have been left behind, particularly for Dr. Spooner and Mr. D. R. Bhandarkar, whose circles have been chiefly affected by the reduction in the cadre. Financially, too, as was only to be expected, the work of the Department has been much affected by war conditions; for small as our expenditure previously was, it has been still further reduced during the past year; so that funds are now available for little more than the bare maintenance of the monuments in our charge and for such unavoidable measures as are necessary to prevent them suffering irretrievable harm. Thus, to take as an example the Eastern Circle, comprising Bengal, Assam, Bihar and

Conservation.
Eastern Circle.

Orissa, and the Central Provinces : in these four Provinces a sum of Rs. 33,500 in all was expended on conservation and was distributed over 183 works. But of these 183 works there were only seven special estimates involving an expenditure of more than Rs. 1,000, and only two involving an expenditure of more than Rs. 2,000, namely : the repair of the east wing of the temple of Anandeswar at Lasur in the Central Provinces, which was in a parlous condition, and the improvement of Sher Shah's tank at Sarsaram. The latter work, which has now been completed at a total cost of Rs. 19,958, constitutes the biggest undertaking of the year in this circle ; but the greater part of this expenditure was borne by the Municipality, a sum of only Rs. 3,000 being contributed from archaeological funds.

**Northern Circle.
Delhi.**

Again, in the Northern Circle a reduction of almost half a lakh was effected over the preservation of Muhammadan and British Monuments, namely : Rs. 20,000 in the Delhi Province and nearly 30,000 in the Punjab. In Delhi itself the only projects of any consequence have been the structural repair of the roof of the Diwan-i-Khas at a cost of Rs. 1,000, and the underpinning of the old archway in the Qudsia Bagh ; but some heavier estimates were carried out among the older ruins to the south of Shahjahanabad, the most noteworthy being those relating to the Hauz Khas and Firoz Shah's Kotila, the conservation of which could not be postponed without serious risk to the fabrics. At the former of these two monuments (Pl. I b), which lies a little way off the Delhi-Qutb Road, the exposed and shattered core of its vaulting has now been rendered secure and watertight, and the clearance of a corner of the great tank at the foot of the building has resulted in the discovery of the original flights of steps leading down to the bed of the tank, which itself proves to be singularly well preserved beneath the present earth level. In the treatment of the walls of Firoz Shah's Fort and of the several monuments comprised within their circuit (namely : the *baoli* which had been brought to light in the previous year, the pyramidal structure which supports the column of Asoka (Pl. I a) and the ruined masjid on the river front (Pl. I c), whose architecture once appealed so strongly to the Emperor Timur)—in each of these cases the most costly items have been the clearance of the accumulated heaps of débris, the pointing of open joints, and the underpinning of dangerous masonry, always an important item in this kind of conservation work. At the same time attention has been paid to levelling and draining the interior of the Fort and to laying it out in broad stretches of turf intersected by paths, which help greatly to enhance the beauty and interest of the ruins. Much still remains to be done in this Pathan fortress, if all its fragmentary structures are to be saved from collapse, but it will necessarily be some time before funds can be provided for the purpose and meanwhile it has been found expedient to rail off some of the buildings which are in an exceptionally dangerous state and which, if left open to access, would constitute a real danger to the public.

At the Qutb several of the pillars in the colonnade of Altamsh, which were leaning at precarious angles, have had to be reset, and, in order to compensate for the stoppage of traffic through the Qutb grounds, a new road has been made between Mehrauli and Lado Sarai. Here, too, an improvement has been effected by extending the grounds towards the south and including in them the area next to the Metcalfe estate, which is now being laid out on the same lines as the rest of the enclosure. Another striking improvement in the neighbourhood of Delhi concerns the approach to Humayun's

tomb and the Bu Halima garden. The old road leading to the tomb, which used to skirt round the back wall of the Bu Halima garden, has now been abolished and a new approach, in every way more pleasing and more dignified, has been taken from the Sabz Burj, at the junction of the Delhi-Muttra road, straight to the entrance of the Bu Halima garden, along an alignment approximately axial both with this gateway and with the tomb of Humayun. Simultaneously, the boundary walls of the Bu Halima garden and of Isa Khan's Tomb, which flank this approach, as well as the enclosing wall of the Arab Sarai, have been repaired (Pl. I d) and the whole area improved by turfing and the planting of trees.

Before leaving the subject of these Delhi monuments, I should like to take this opportunity of remarking on the exceptional care and thought that are being bestowed upon their conservation by everyone concerned, from the Chief Commissioner downwards. Amid the manifold activities incident to the building of a new capital city it might well have happened that the claims of these monuments would be temporarily forgotten, and, with any less efficient administration, there is little doubt that this would have happened. But so far from the monuments having suffered any neglect, they have been the objects of as much consideration and sympathetic handling as any group of monuments in this country has ever received. Indeed, I may say that nowhere else in India has the Archaeological Department experienced such whole-hearted co-operation and active support as it has experienced from Mr. Hailey and his assistants, as well as from the officers of the Public Works Department who have been responsible for the actual execution of the majority of the repairs. Nor, among those to whom we are indebted for much of the success which has attended our efforts at Delhi, must I omit to mention the names of Messrs. Griessen and Locke, the expert Superintendents of the gardens, who have laboured ungrudgingly to carry out our schemes for beautifying the surroundings of these monuments.

The budget provision for Muhammadan and British Monuments in the Punjab, was reduced from Rs. 50,895 in 1914-15 to Rs. 22,736 in the succeeding year, and, inasmuch as more than half of this sum was absorbed by the ordinary recurring charges for maintenance and annual repairs, only a small balance was left for works of a special nature. In the neighbourhood of Lahore the task of repairing the enclosure wall of Jahangir's tomb, as well as the dilapidated *baradari* on the north side of it, was brought to completion, and the road in front of the Shalimar gardens was metalled and planted with trees; in the Muzaffargarh District the structural repair to the tomb and mosque of Tahar Khan Nahar at Sipur, to which I referred in last year's report, was also finished; and at Hissar the old town wall was secured by underpinning and other measures, while the Lat-ki-Masjid in the same place was much improved by the removal of modern accretions and by replacing the incongruous roof of thatch by one more in keeping with the character of the ancient structures. Besides these projects among Muhammadan edifices, a few Buddhist monuments in the Province also came in for special attention, notably, the Bhalar Stupa (Pl. II a) and several other monuments which I have recently excavated at Taxila, the Manikyala Stupa in the Rawalpindi District, the Baijnath temple in Kangra, and the rock-cut temple at Masrur. The conservation of the Bhalar Stupa, which I have now been able to identify with the stupa of the 'Sacrificed Head' described by Hiuen Thsang, was considered by the Executive Engineer of Rawalpindi

Punjab.

too hazardous an operation for the Public Works Department to undertake. I was compelled, therefore, to take the work in hand myself and to carry it through to completion under my own personal supervision. The difficulty was that the base of the drum up to a height of some 17 feet had decayed away, and that the old facing stones above, with their pseudo-classic decorations, were frequently falling and could not but be a menace to anyone working beneath. With what success the underpinning and refacing of this valuable but sadly decaying structure has been achieved, will be apparent from the photo on Plate II a. It still remains, however, to repair the massive square terrace on which the stupa stands, and to clear the stupa approach, as well as some portion at any rate of the monastery attached to it, where Kumaralabdhā, the founder of the Sautrantika school, is reputed to have composed his treatises.

United Provinces.

Among the Buddhist monuments in the United Provinces there was only one that underwent special repair, namely the Dhamekh Stupa at Sarnath, from which the glaringly white crown of plaster was removed and the old brick-work beneath rendered water-tight by dismantling the outer layers and resetting them in cement. On the Moslem buildings of this Province, on the other hand, a sum of Rs. 63,190 was expended, of which approximately half went to annual and half to special charges. At Lucknow, the chief buildings to receive attention were the Karbala of Nasiru-d-din Haidar, the Darn-i-Shafa, the Nandan Mahal and the Sola Khamba, where, besides structural repairs to the buildings themselves, the grounds also which enclose them were fenced round and laid out with lawns and shrubs and trees. At Agra, the removal of the untidy *chhappar*, which so disfigured the outside of the Jami Masjid, made further progress, several improvements were effected at the tomb of Firoz Khan on the Gwalior Road, and the reconstruction of the east causeway in the garden of Akbar's tomb was continued. At Chunar, the tomb of Iftikhar Khan, and at Meerut the tombs of Abu Muhammad Khan and Shah Pir—the latter erected by the Empress Nur Jahan to the honour of a holy faqir—were rescued from decay and preserved at a combined cost of Rs. 5,700.

Western Circle.

One of the most fascinating and romantic cities of antiquity in the Bombay Presidency, but one which has been much neglected in the past, is that of Champanir, once the populous capital of the kings of Gujarat but long since deserted and overgrown with jungle. Here a start has been made in the comprehensive scheme which I had worked up as far back as 1913, the monuments selected for repair being: first and foremost, the Halol Gateway, which owing to the collapse of the abutments, as well as of the side and end walls, was in a most precarious condition; secondly, the city entrance which has had to be cleared of débris and widely underpinned with cement concrete and brick facings; thirdly, the Custom House, or Mandvi, as it is locally known, where the filling between the arches on the north side has had to be dismantled and reset, and displacements in the columns and walls counteracted by tie rods and buttresses; and, fourthly, the guard-room near the Godhra Gateway where many fractured lintels have had to be jacked up and supported. These initial and most urgent measures which have been carried out at Champanir, represent, needless to say, but a fraction of what is necessary, if this splendid group of edifices is to be saved from ruin, but operations on an extensive scale, such as have been carried out at Agra, Delhi, Ahmedabad, Mandu or Vijayanagar, are for the present out of the question, and

the most we can hope to do is to save those structures which are in imminent danger of collapse and reserve the remainder for more propitious times. In the Central Division of the Presidency the repairs which I recommended in 1913 to the temple of Mahesvara Mahadev at Patan, were brought to completion, and other special repairs were carried out to the Temple of Gondesvar at Sinnar, which was in a sadly mutilated state and to the Pandu Caves at Nasik, where the decaying portions of the cave fronts had to be supported on pillars, tanks to be filled in, and a preservative applied to some of the disintegrated rock carvings. In the Southern Division, the chief estimates were concerned with the construction of dry stone enclosure walls round the early mediæval temples at Aihole and Pattadakal, which are now in a very good state of preservation, with the erection of supports for the *sikhara* of the temple of Dodda Basappa at Dambal (a work demanding exceptional care and circumspection), and with the insertion of angle irons and some other necessary measures at the temple of Siddhesvara in the same district. Other undertakings in the Bombay Presidency that also deserve mention are the renewal of broken stone jali panels in the Zanana palace at Sarkhej; the dismantling and reconstruction of a portion of the mosque of Bahlol Khan Qazi at Dholka; and various structural repairs to the Jami Masjid, Ibrahim Rauza and Chand Baoli at Bijapur.

To the systematic campaign of conservation which has been going on for many years past at the capital of the great Vijayanagar kings at Hampi, I have made frequent references in previous reports. Thanks to Mr. Longhurst, the work of rescue and repair has received an added stimulus during the last four years, and it is gratifying to be able to record that every structure of paramount importance on this historic site is now in good order. Some further measures have yet to be taken for the improvement of the roads and pathways giving access to a few of the monuments, and a few of the minor buildings are still in need of attention. But the cardinal and most costly repairs may now be regarded as complete, and the officers of the Public Works Department concerned in carrying them through are to be congratulated on the success they have achieved.

Southern Circle.

A great difficulty associated with the repair of the Pallava Temples at Conjeeveram is due to the peculiarly inferior quality of the sandstone used in their construction. Even when first quarried, the sandstone appears to have been full of natural holes and fissures, which were once filled with brick and mortar, and the defects then concealed from view by plastering the surface with a coat of stucco. Much of this old stucco work, however, has now decayed, leaving the brick and stone work beneath it exposed, and though the stone work could no doubt be better preserved by restoring the stucco in its entirety, such a course would obviously result in giving the temples a brand new appearance and in destroying their beauty and interest as ancient monuments. Accordingly, the recent repairs executed by Government have been restricted to grouting and pointing open joints and cracks with specially prepared mortar coloured to match the old work. Simultaneously and following the same lines, some of the earlier repairs carried out by the Public Works Department, which had erred in the direction of over-restoration, have been corrected and much improved. The pity is that the whole of this historic group of temples cannot be treated in the same manner, but unfortunately many of the temples are still in use as places of worship, and it is of course impossible

to prevent the owners from renewing the missing stucco ornaments, or from whitewashing the buildings.

At Mahavalipuram in the Chingleput District, commonly known as the 'Seven Pagodas,' the main problem has been to prevent the encroachment of sand around the basements of the temples, and in the case of the great Siva Temple erected on the foreshore and known locally as the 'Shore Temple' there has been the further problem of preventing the sea itself from washing away the foundations. To avert this catastrophe, a breakwater was constructed some years ago, and this breakwater has now been repaired and strengthened. Additional casuarina trees, moreover, have been planted to hold up the drift sand, and a new road has been started across the sandy tract between the Travellers' Bungalow and the 'Five Raths', which, being planted with casuarina trees, will eventually provide a shady avenue across the hot and sandy plain.

Now that the more important works at Hampi have been completed, the preservation of the Gingee Fort in the South Arcot District is likely henceforth to stand first in point of importance among the archaeological works in the Presidency. This historic fort stands on three lofty hills connected together by massive fortifications arranged in the form of a triangle, the triangular space enclosed being about three miles in perimeter and forming the lower fort, while the three hills constitute the citadels. The most interesting buildings in this Fort are situated in the two citadels of Rajagiri and Krishnagiri, respectively, and also in the lower fort at the foot of Rajagiri. They include great granaries, Audience Halls, palaces, barracks, temples and ornamental tanks, the finest of which are now in course of repair, as are also the historic Arcot Gate, the Pondicherry Gate and the royal battery constructed by the French. On Chandrayan Drug no work will be undertaken, as this ruined citadel contains nothing worth preserving at Government expense.

Other noteworthy undertakings in the Madras Presidency that have been brought to completion during the past year relate to the handsome tomb of Abdul Wahab Khan, in Kurnool Town, and of the Nayak's Darbar Hall in the Tanjore Palace. The unsightly matting which used to fill the arched openings of the façade of the latter and the dilapidated verandah in front have been removed and suitable fan-lights fixed in their place. At Tanjore, also, the large hall known as the Sangita Mahal is being put into a thorough state of repair and is to serve in future as an office for the District Board.

Burma Circle.

In Burma, the cause of conservation has suffered perhaps more owing to war conditions than in any other circle, the Provincial grant having been suddenly reduced, when the year was half spent, from Rs. 28,071 to Rs. 6,831, which, apart from the small imperial grant-in-aid of Rs. 8,000, sufficed for an average expenditure of Rs. 75 for the maintenance and repair of each of the 91 monuments of which the Local Government has taken in charge and which constitute the finest examples of Buddhist architecture. It might seem as if economy could give no further than this, but as a fact in the present year this meagre provision has been still further reduced to an average of less than Rs. 60 per building. Fortunately, with the grant-in-aid provided by the Imperial Government it has been possible to effect some of the most necessary and pressing repairs to the Palace Buildings at Mandalay, to conserve the Sarabha Gate of

Pagan, which is the only surviving remnant of the old wall built in the 9th century, and to continue the restoration of the corridors of the Eastern Petleik Pagoda in the same place, which are indispensable, if the unique series of terracotta plaques recently unearthed there are to be saved from destruction.

While in the major part of British India the preservation of ancient buildings has necessarily been retarded, in the Native States, which are less affected by war conditions, it has continued to make increasingly rapid strides. In the Hyderabad State especially, thanks to the enlightened liberality of H. H. the Nizam, and thanks also to the personal interest taken in the matter by the late Sir Alexander Pinhey, by the Financial Minister, Mr. Glancy, by the Home Secretary, Mr. Hydari, and by other officials, a most energetic campaign has been prosecuted among all classes of ancient monuments. During the year under review estimates aggregating Rs. 86,000 have been sanctioned for the repair of the cave temples at Ajanta and Ellora, for the temple at Ittagi and for the Badshahi Ashur Khana ; and a systematic programme, moreover, has been worked up by Mr. Ghulam Yazdani, the Superintendent of Archaeology, for the preservation of the monuments at Bidar, including the Sola Khamba Mosque erected by the Bahmani Kings, the famous Madrasah of Mahmud Gawan, the tomb of Ali Barid and the Rangin Mahal in the Fort, celebrated for the beauty of its mother-o'-pearl work.

**Native States.
Hyderabad.**

As regards Ellora, I myself was fortunate in being able to devote two weeks in the month of January to a thorough examination of this series of rock-hewn temples and to advise H. H. the Nizam's Government in detail as to the measures necessary for their preservation. The most important items in my notes, which have since been approved by His Highness's Government, are : (1) the erection of structural supports in several of the caves ; (2) the provision of adequate drainage, the lack of which has hitherto been responsible for much of the damage in these caves ; (3) the substitution of neat stone masonry in place of modern plaster repairs ; (4) special repairs to the top floor gallery on the south side of the Kailasa, including the reconstruction of part of the dilapidated *chhatri* and the diversion of the road to prevent the inundation of water ; and (5) the construction of buttresses to support the massive rock which is slipping from its bed on the west side of the Indra Sabha Temple. The caves of Ellora have recently undergone a thorough cleaning, and their present state is very different from what it was a few years ago. The minor caves, also, known as Ganesa Lena, have lately been excavated, and their frescoes and sculptures, among which the *trimurti* is prominent, have been exposed to view.

In the Native States of Central India and Rajputana the most notable progress was made in the following places : at Mandu in Dhar State, where some necessary reconstruction work was carried out at the Alamgir Gate and at the entrance to the Jami Masjid ; at Sanchi in Bhopal State, where I myself was engaged during part of the winter in saving from collapse the south-west quadrant of the Great Stupa and in other urgent works ; and at Surwaya in the Gwalior State. The last mentioned site is situated about twelve miles from Sipri, the summer resort of the Gwalior Darbar, and it was by the express personal wish of H. H. the Maharaja that the reclamation of the two temples and monastery situated there, was taken in hand. Despite the loss of their spires, the temples (Pl. III) are fine examples of late mediæval architecture with deep bold carvings which reached their highest perfection in the porch of the larger

**Central India and
Rajputana.**

temple ; and the monastery by their side is invested with exceptional interest owing to the great rarity in India of buildings of this class. These monuments are situated within a small fort and the whole area inside the defences has now been cleared of jungle, and the buildings themselves, which were in a very dilapidated condition, have been put into sound structural repair.

Kashmir.

The preservation of the ancient Hindu temples of Kashmir with their ponderous masonry insecurely put together and destitute of any adequate foundations, is a matter of exceptional difficulty ; but by skilful underpinning and other well thought-out measures the State Superintendent of Archæology, Mr. Daya Ram Sahni, has succeeded in putting the two temples at Pattan, in the Srinagar valley, and at Babbapura and Kirmchi in Jammu, in a thorough state of repair, and he is now engaged on the temples at Buniar and Uri. A more extensive undertaking than these and a still more elaborate piece of engineering is the restoration of the great Jami Masjid in Srinagar, which was constructed largely of deodar timbers and has consequently suffered even more than the older buildings of stone. For this enterprise the Muhammadan community of Kashmir had with much public spirit collected a sum of about Rs. 3,00,000, and in the early spring of last year I was invited to go to Srinagar and to advise their Committee as to the best methods of setting about the work. A part of the reconstruction had already been started by local contractors, but I found that both the brick and the timber work which they were putting in, fell far short of the requisite standard, and it was evident that the Muhammadan community would be sadly disappointed if the work were to proceed on the lines on which it had begun. Accordingly, I advised the Committee that, with the consent of the Darbar, the work of restoration should be put under the control of Colonel H. A. D. Fraser, R.E., the very able State Engineer, who had generously offered his help in the matter, and that the execution of the work should be put into the hands of an approved and competent contractor, accustomed to contracts on a large scale. At the same time I drew up a note detailing the lines on which I thought the work should proceed, and subsequently arranged for Mr. J. A. Page, Assistant Superintendent, Western Circle, to be deputed to Srinagar for three months in order to assist Colonel Fraser in the preparation of his working drawings ; and in order to cover the expenses connected with the staff, I obtained from the Government of India a grant-in-aid of Rs. 5,000. My advice as to the direction and execution of the work was, I am glad to say, accepted by the Committee and the contract has since been given to Mr. Thad. Avery, who is well known in Kashmir for the successful work he has done on the barrage of the Jhelum and who has already made a most excellent beginning at the Jami Masjid.

Classified lists of monuments.

A function of the Archaeological Department on which the Government has repeatedly laid emphasis in the past, is the preparation of classified lists of monuments in each circle, on the ground that no scheme of conservation can be really effective unless careful stock is first taken of the materials to be conserved. The majority of these lists, compiled on the lines prescribed by Government as far back as 1883, have now been published, and so far as the needs of conservation are concerned, there is no reason to suppose that the completion of the few remaining ones will make any very appreciable difference, since the Department is now in possession of practically all the information it requires for formulating and carrying out an efficient programme. On

the other hand, as I pointed out in a recent note on our archaeological policy, these lists can be of real value for purposes of research, provided that they are scholarly and reliable compilations ; and it is for this reason that the latest lists are being prepared with greater care and thoroughness than was hitherto the case. In Burma, the revised lists of all the eight divisions of the province, namely : the Mandalay, Sagaing, Meiktila, Magwe, Arakan, Tenasserim, Pegu and Irrawaddy Divisions, were completed and published during the year ; in the Eastern Circle, the major portion of the Tirhut volume, for the compilation of which two extra photographers have been added to Dr. Spooner's staff, will, it is hoped, soon be ready for the press ; in the Delhi Province, the Delhi Zail is finished and a start is being made on the Mehrauli Zail ; and in the Gwalior State Mr. M. B. Garde has succeeded in cataloguing 124 more monuments distributed over 27 places in the Gwalior, Bhind, Gird, Tonwarghar and Narwar Districts. In connexion with the list in Tirhut Dr. Spooner notices that the task of cataloguing the vast number of temples situate in that part of India has been very much facilitated by classifying them according to their various types and describing these types in the introduction to his volume, thus avoiding the necessity of frequent repetitions in the text of his work.

In my last report I referred to an agitation which had been worked up in Burma against the application of the Ancient Monuments Act (No. VII of 1904) to pagodas and other religious buildings. This year the agitation spread from Bassein and Henzada to other districts and assumed a somewhat graver character, nor was it until much time had been spent by Mr. Taw Sein Ko and other officials in explaining the objects of the Act and the aims of Government in applying it, that it eventually died down. Mr. Taw Sein Ko is of opinion that the agitation was partly political in character and partly due to fears lest the Government should seize the pagoda treasures for war purposes, just as former rulers in Burma were wont to do in times of stress. Whatever the cause may have been, it is evident that the public in Burma must have been labouring under very false ideas regarding the scope and limitations of the Act. Fortunately, on this occasion no appreciable harm has resulted, but such agitations are manifestly very undesirable, and if we are to avoid a possible repetition of the trouble, it is important that the meaning of this Act, as well as the policy of Government towards religious monuments, should be clearly understood both by local officials and by the public. So far as religious monuments are concerned the Act confers no powers whatever on Government to interfere with the rights of the owners or trustees, and the only purpose of notifying such buildings as 'protected' under the Act, is to save them from damage or defacement by persons other than the owners. With the management of buildings used for religious observances, it is the policy of Government to avoid any kind of interference, though in cases where the endowments of such buildings have proved insufficient for their upkeep, the Government has not infrequently rendered financial assistance on condition that their repairs should be carried out on lines approved by the Archaeological Department, and in other cases it has helped with expert advice and guidance. Further than this the Government is not prepared to go ; nor is it willing to employ any means other than those of persuasion to put a stop even to the lamentable destruction of ancient edifices at the hands of religious enthusiasts.

In the Government of India (Dept. of Rev. and Agri.) Resolution of the 7th July, 1903, it was explained that Public Works' officers were expected to

Ancient
Monuments Act.

Public Works'
Inspection
Reports.

make systematic annual or even more frequent inspections of the monuments in their charge. In conformity with this Resolution most of the Local Administrations have now required Executive Engineers to furnish annual inspection reports, and these reports have been found of inestimable value not only as a guarantee that the monuments to which they relate have been regularly inspected, but also as an aid to Archaeological officers in formulating their programmes of works and planning their tours for the ensuing season. In the Punjab and United Provinces, where the condition of many monuments in outlying districts still leaves much to be desired, Mr. Hargreaves expresses the opinion—an opinion which I fully share—that the submission of such reports would go a long way to remedy the present unsatisfactory state of things. As regards the United Provinces, I venture also to think that the Local Government would do well to follow the example set by other administrations and depute a certain number of their Public Works' overseers specially for archaeological work. The well known groups of monuments at Agra, Fatehpur and other important centres, where responsible officers either of the Public Works Department or of the Archaeological Department have been constantly on the spot, have been most admirably repaired. But the same cannot, unfortunately, be said of the monuments in more remote places, which are visited but rarely by the Assistant, and perhaps never by the Executive Engineer who has charge of them. In such cases it is indispensable that the overseer responsible for the execution of the repairs, should be thoroughly familiar with the aims and methods of archaeology, and that he should not make the mistake of treating some age-worn building as he might treat a modern factory or railway station—a mistake which he is bound to make unless he has been specially trained for this class of work.

**Exploration.
Taxila.**

This is the third year since I started my excavations at Taxila, and on each occasion that they have been resumed, a fresh vista of discoveries has been opened out. This season it is on the buried monasteries and stupas situated among the hills to the south-east of Sirsukh that interest centres; for, thanks to their well-protected positions and thanks to the more rapid accumulation of débris in the defiles between the hills, they prove to be in far better preservation than similar structures in the open country. How wonderfully well preserved these buildings are, despite the fact that they have been buried for 1,500 years or more, will be evident to the reader from the illustration on Pl. IV *c*, which exhibits a bird's eye view of a monastery that I have unearthed in one of the gorges behind the village of Mora Moradu, as well as from the first figure on the same plate, which illustrates some of the stucco reliefs with which the walls of the adjoining stupa are adorned. The stupa in question, which is standing to a height of some 20 feet and is constructed of semi-ashlar masonry, consists of a rectangular plinth and round drum, both of which are relieved by mouldings and pilasters with groups of Buddha and Bodhisattva images decorating the pilasters or disposed in groups in the bays between them. Many of these reliefs were executed with masterly ability and with a fine sense of line and movement, especially in the treatment of the draperies, which to my mind surpass anything of the kind which I have seen executed in stucco in the North-West of India. The monastery consists of several courts, the chief one of which is rectangular in plan, measuring over 100' each way and containing an open quadrangle in the centre with ranges of cells in two storeys on the four sides, and with an entrance porch approached by a double flight of steps (Pl. IV *b*) in the

middle of the northern side. In front of the cells ran a broad verandah carried on timber pillars, the stone foundations of which can still be seen spaced at regular intervals round the edge of the depression in the middle of the court. Timber also must have been largely used in the construction of the upper storey; for a stratum of charcoal several feet in thickness mixed with burnt clay, iron nails and fittings, was found on the floor of the court and cells. The steps which gave access to this upper storey can be seen in the bird's-eye view in one of the cells on the farther side of the court and nearly opposite to the entrance. In another cell, which is also visible on the left side of the picture and is distinguished by the roof with which it has been protected, there came to light an almost perfectly preserved stupa (Pl. V b), 12 feet 10 inches in height. It was composed of *kanjur* stone faced with stucco (in which all the decorative features are worked) and finished in colours—crimson, cobalt and yellow ochre—of which some traces are still adhering to the surface. In the entrance porch, as well as in front of the cells, are niches of typical Gandhara form containing groups of figures in terracotta or stucco (Pl. V a), and the walls of the court are further adorned at intervals by colossal figures of the Buddha in a sitting posture, with highly interesting reliefs of Buddhas and lay-worshippers on their pedestals. The masonry used in this monastery is the large diaper variety, and indicates that it was erected during the flourishing period of Kushan rule—a date which is confirmed by a number of coins of Huvishka, Vasudeva and later Indo-Sasanian Kings found within it; but that it was subsequently repaired on a large scale, is evident from the many additions made to it, and especially to the porch and chambers on the east, in semi-ashlar masonry. Probably it was in occupation for some two centuries before it was finally burnt out, and it is to the latter epoch (that is, to the early part of the 4th century A. D.) that we must assign most of the stucco images and reliefs both in the monastery and on the adjoining stupa.

Two other stupas and another monastery, also in the semi-ashlar style, were excavated a little to the north-east of the city of Sirsukh at a spot known locally as Lalchak. These are less well preserved and destitute of the stucco ornamentation which once covered their walls, but they are interesting by reason of their plans as well as of the small antiquities discovered inside them, which, among other objects, included a rouleau of 120 coins of Antialkidas, Azes I, Azes II and local Taxila issues. In the city of Sirsukh itself I cleared a section of the fortifications at the south-east corner of the city, and found that they were constructed of the large diaper masonry characteristic of the Kushan epoch, that they were strengthened at the base by a heavy convex footing both on the inner and outer sides and that they were protected at regular intervals by circular bastions, which were provided with loopholes for the use of the archers. In the heart of the city of Sirsukh some headway was also made in the excavation of a block of buildings of the 3rd or 4th century A. D., which contains several courts and groups of chambers and in point of size and plan seems likely to prove similar to the palace in the older city of Sirkap.

At the Dharmarajika Stupa my efforts this season were directed to clearing the débris on the north of the main structure and to exposing a number of small stupas and chapels in various parts of the site. In three of these stupas the relic chambers were found intact and proved to contain reliquaries of considerable value. In one was a steatite casket with a smaller gold casket for the relic inside, three safety pins of

Lalchak and
Sirsukh.

Dharmarajika
Stupa.

gold, beads of lapis lazuli, amethyst and the like, and coins of Maues and Azes I ; in another the casket contained a variety of precious stones, gold leaf and copper coins of Maues, Appollodotus and Spalahores, and one coin of unknown type ; in the third the casket was of ivory with a smaller reliquary of the small material inside it. Of the newly discovered buildings on this site the most interesting are two chapels in the north-east corner of the site, which are in a late style of masonry and contain several figures of the Buddha of varying sizes, the smaller ones being in a tolerably good state of preservation. Among the smaller finds may be mentioned a fair collection of Gandhara sculptures, some fine stucco and terracotta heads, a hanging lamp of stone and an inscribed earthen jar.

Sirkap.

In the city of Sirkap I cleared another extensive block of buildings and a spacious stupa court on the east side of the High Street and opened up some new blocks on the west side, one of which appears to be on a scale resembling that of building P which I have described in a previous report. A full description of these and of other discoveries at Taxila will be included in the second part of this report. Throughout the season's work on this site I have been most ably assisted by Mr. V. Natesa Aiyer, Officiating Superintendent in the North-West Frontier Province, who has been in immediate control of the operations at Mora Moradu, Lalchak and Sirsukh. It is a pleasure to record here my obligation to him and also to my Excavation Assistant, Mr. H. Panday, and the other members of my staff for the whole-hearted service which they have rendered me.

Eastern Circle.

The exploratory work of the Survey in Eastern India during the year under review has not, as usual in recent years, been limited to Sir Ratan Tata's excavations at Pataliputra, but also included, thanks to the liberality of the Council of the Royal Asiatic Society of Great Britain and Ireland, the preliminary examination of the famous site of Nalanda, a few miles to the north of old Rajagriha. Nalanda, as is well known, was for many centuries the seat of one of the most famous of Buddhist "Universities," and the adequate exploration of it has for long been recognised as one of the chief desiderata in Eastern India. Other claims upon our departmental funds had, however, rendered excavation here impossible, until the Royal Asiatic Society decided to put at our disposal the funds, amounting to £218-10-0, collected by it some years ago for exploration. Owing to the formalities connected with the acquisition of the land the work at Nalanda was not commenced until late in the spring, when time was left for little else besides the sinking of trial trenches ; but Dr. Spooner, who as Superintendent in the Eastern Circle took charge of the operations, was able to trace the general outline of one large monastery, of which the north side measures over 200 feet in length, and the masonry of which is still standing in some parts to a height of something like 24 feet, the wall being built of brick, but of unusual quality and fineness. One corner of an adjoining monastery to the north has also been uncovered, and the remains of a temple building farther to the north-east have been partially cleared. "This latter structure," writes Dr. Spooner, "is of special interest from the fact that, although only the base or plinth appears to be preserved, this plinth is covered with an extensive series of sculptured plaques in stone, comprising apparently 211 sculptured panels, so far as we can estimate at present. These panels are all different, and all in remarkably good condition, exhibiting a wealth of decoration, the careful study of which is likely

to prove of real value for the history of design in India. The date of this building can only be approximated as yet, for we cannot be sure whether it covers the remnants of an older structure or not, and whether the sculptured panels are in their original use, or are earlier work in later application. The style of the sculpture, however, suggests the period of the 6th century A. D., and this date may be tentatively accepted as provisional. The thorough excavation of this site as well as of the many monasteries clustering around it, is sure to yield a very substantial wealth of art material. So far, we have but few detached figures, one or two small Buddhas of great delicacy, and a multitude of inscribed seals, containing, so far as can be judged, prevailingly the Buddhist creed. But it is perfectly apparent even now that the soil here is packed with material of value of many different sorts. It seems from present appearances, however, as though the older monuments of the site had been built over, in most instances, by structures of a later date, and that as yet we have approached these later buildings only. But it is too early as yet to speak with certainty upon the point. The further developments of the work promise to be most interesting.

"At Pataliputra"—to continue Dr. Spooner's own description of his work—"no further work has been done this season at the main terrace, as it was inferred that little artistic material could reasonably be expected here, and it was material of this class that Sir Ratan Tata most desired. In an endeavour to meet these wishes, therefore, trial excavations were commenced at Bara Pahari, where the great Asokan stupas are supposed to lie, and this resulted in the location of two structures of this type, which seem to be of Mauryan date. The work seems to have established the interesting fact that these stupas did not rise directly from the ground, but stood upon a lofty platform, analogous to the stylobate we had been forced to infer from the stratification at the former site. But one of the two monuments which I was able to open this year proved to contain no special deposit of any kind, and for general excavation the site does not seem promising. There is an enormous mass of earth covering the several stupas which the main great mound apparently contains, and the cubic volume of earth which would have to be removed to clear the whole would be prohibitive. I do not, however, mean to say that in this mass there is no possibility of important material. On the contrary, the fragments of Mauryan stone-work we have found suggest plainly enough the opposite; but it is debatable whether a like amount of money expended elsewhere would not yield a richer return. I myself am of opinion that there is every possibility that the outer edge of the main platform on which these stupas stood may have been decorated, and that some of this decorative material may be still preserved. It seems to me, therefore, highly desirable that at least trial diggings should be made in this portion of the site especially, which means farther out into the surrounding fields than we have gone. These operations need not be extensive, and the existence or otherwise of such material ought to be determinable, one would think, in a short time, and at no large expense. This much work should certainly be carried out before the site is left, and still further work be done, when funds for such a purpose are available.

"At the Bulandi Bagh site, north of the railway, we had met, toward the end of the previous season's work, an extraordinary wooden structure, like a slanting wooden frame of mighty beams, whose nature could in no wise be surmised. On clearing the

surrounding area this year it turned out that this constitutes what I must call the western wall of a small wooden house, of some peculiar kind, the north and south walls of which are still in part preserved, and which rise vertically. The eastern side of this structure is not enclosed. There are, however, within the standing walls the remains of a solid wooden floor composed of cross beams running north and south, and to my astonishment this floor was found to extend eastward beyond the limits of the house itself. Indeed, whereas the house itself appears to have been something like 15 feet a side (this is approximate merely), the floor goes on almost indefinitely toward the east, and has so far been followed for 350 feet. I must leave the understanding of it all until the future, until we can see where and in what way this flooring terminates, and try to discover what its purpose was. For the present, the main thing to notice is that the soil within the standing walls of the small house was packed very full of antiquities of every sort. We have recovered a considerable number of terracotta figurines of remarkable interest, although of less intrinsic beauty, save for one unusually fine head of a smiling infant, which in my individual judgment is one of the very best pieces of ancient modelling in clay which I have yet seen. We also have something like two hundred coins, almost all of the square type of primitive cast coins, of uncertain ascription. Their great antiquity is clear, and we may ultimately learn more about them here. In addition to these we have one gold ring of very unusual interest, which may be assigned provisionally to the Mauryan period, and two or three metal arrow heads, and knives and swords, etc. At least two wooden sandals have also come to light, as well as practically the whole of a wooden chariot wheel of an extremely early period—so far as I know, the first object of this kind to be met with in any good state of preservation in this country. There are also stray fragments of a most curious type hitherto unknown to me, which seem something in the nature of fusible pastes, fashioned into ornamental objects of some kind which cannot be distinguished from the minor fragments which we have as yet. The superior quality of these fragments and their unusual nature invest them with exceptional interest, and it is to be hoped that we shall in the course of time recover more, and be in a position to interpret them. The yield of this site, therefore, from the scientific point of view, has in no way been disappointing. The material is abundant, and of great age, and when we can carry the work far enough to unravel the various mysteries now connected with the site, this unravelling is hardly likely to fail of fascination. But for the present it is premature to hazard any interpretation of the site at all."

À propos of Dr. Spooner's discoveries at Pataliputra I should like to add a few words about the theory which he has been led to propound regarding a Persian period of Indian history. Since it was first put forward in the pages of the *Royal Asiatic Society's Journal* this theory has given rise to no little discussion among scholars and others interested in the matter, and I understand that in order to present a fuller exposition of his views, Dr. Spooner is now engaged in writing a special volume on the subject, in which he is elaborating his arguments more fully than was possible in the preliminary article published last year. Until Dr. Spooner's promised volume is issued, it would serve no useful purpose to discuss the questions raised by him. Meanwhile, however, I may be permitted to state, in order to remove a misconception that appears to have arisen on the point, that Dr. Spooner's views are personal to himself and in no

way represent the official views of the Archaeological Department. So far as monumental evidence from Pataliputra is concerned, it seems to me to confirm what had already been deduced from previous finds of the Maurya epoch, namely: that the art of that period was subject to strong Persian or Perso-Greek influence; and that a close intercourse must have existed in those days between India and Iran. But, for my own part, I see no reason to infer that these discoveries connote the religious, social or political dependence of the former country on the latter.

In the Western Circle excavations were carried out on behalf of the Darbar on two sites at Nagari in the Udaipur State. At one of these—a mound in the citadel on which the modern temple of Mahadeva is perched—Mr. Bhandarkar brought to light the remains of a square stupa decorated with carved bricks and terracotta reliefs of considerable artistic merit. During the 5th century of our era this stupa appears to have been converted into a Saiva temple, a notable remnant of which is a unique though fragmentary *torana*, adorned with lotus designs and conventional devices as well as with panels containing scenes from Siva's life. The other site examined by Mr. Bhandarkar is known locally as Hathi-bada, and is situated about a mile east of the village. It consists of a rectangular enclosure nearly 300 feet long by half as much in breadth, surrounded by a stone wall 9' 6" in height, which was pierced by an entrance on the southern side. This enclosure Mr. Bhandarkar thinks is referred to in an inscription found in a well at Ghosundi, not far from Nagari, which dates from the 3rd century B. C. and speaks of the erection of a *pūjā-silā-prākāra*, that is, a 'worship-stone-enclosure' by one Gajayana, son of Parasari, in honour of Bhagavat Samkarshana and Vasudeva. That the building itself dates as far back as the 3rd century B. C., is evidenced, in Mr. Bhandarkar's opinion, by his discovery of coins of Sibi-janapada (2nd century B. C.) in the débris over the original floor; and that it was long dedicated to the worship of Vishnu, is indicated, he thinks, by a short inscription of the 7th century A. D., which he found on one of the enclosure stones and which reads:—*Śri-Viṣṇu-pādābhyām*.

Other excavations on a smaller scale which were carried out within the confines of Native States related to a group of prehistoric cairns at Maula 'Ali near Trimulgherry in the Deccan, and to various remains at Avantipur and other sites in Kashmir.

The cairns which Mr. Yazdani opened at the former place are analogous in character to many other groups that have been excavated throughout the Deccan and Southern India, but greater care is being devoted to the examination of these than has ever been given to prehistoric antiquities in the past, and it is hoped that the data collected from them will help to throw light on many problems connected with this early culture in the south of the Peninsula. Among other new features that have been noticed by Mr. Yazdani and by Dr. E. H. Hunt, of the Hyderabad Archaeological Society, is the presence of certain marks on the potteries, which the explorers are disposed to regard as written characters.

At Avantipura in Kashmir the two temples of Avantisvami-Vishnu and Avantisvara-Siva have been almost completely excavated by Mr. Daya Ram Sahni, and they constitute a most striking and valuable addition to the known examples of pre-Muhammadan architecture in this State. The smaller antiquities from Avantipur comprise many stone images, coins and potteries, among the last-mentioned being a large jar

Western Circle.

Hyderabad.

Kashmir.

which bears an interesting Sarada inscription of the 16th century recording that the jar was dedicated in honour of the most illustrious Avantivarman, and thus furnishing clear evidence that the name of Avantivarman was associated with these temples at least three centuries ago. Two other well-known historical sites in Kashmir at which Mr. Sahni has recently made valuable discoveries are Puranadhisthana—the ancient capital of the country—where he has brought to light two Buddhist stupas embellished with a variety of sculptures, of which the relief of Buddha's nativity, figured in Pl. IV *d.* affords a typical example, and Parihasapura, which was founded by Lalitaditya in the 8th century A. D. At the latter spot he has laid bare a chapel or *chaitya*, which there is reason for identifying with the one erected by Lalitaditya himself, a monastery of the usual quadrangular type, in which among other finds he has recovered 44 silver coins belonging to three of the Kashmir kings, and a colossal Buddhist stupa, 127 feet square, originally adorned with niches and images, which was probably erected by Chankuna, the Bukharan minister of Lalitaditya.

Muttra.

Lastly, in the Muttra District, a number of wells have been cleared and a few trial excavations on other sites have been made on my behalf by Rai Bahadur Pandit Radha Krishna, Honorary Curator of the Muttra Museum, whose efforts have been rewarded by the recovery of a large number of antiquities (680 in all, to be precise) ranging in date from the pre-Kushan to the mediaeval period. An idea of the interest attaching to these objects may be gathered from the three carvings figured on Plate V *c*, *d* and *e*, all of which are first rate specimens of Mathura sculpture in the Kushan epoch. The first of them comes from the Kankali Tila, and is the upper portion of a pillar belonging apparently to a stairway balustrade; the second, which comes from the Pali Khera Tila, is a massive stone bowl finely decorated and inscribed; and the third, from the Gosna Tila, is another railing pillar with a half medallion at the top depicting an ascetic seated outside his hut and feeding a deer, while two crows and a snake appear as spectators.

Frescoes at
Minnan-thu near
Pagan.

The Superintendents of the Northern, Southern and Burma Circles have not undertaken any excavations during the past year, but in each of these circles, as well as in other parts of British India and in several of the Native States, various discoveries of interest were made without the help of the spade. Thus, in Burma, at the Paya-thon-zu and Nandamanna temples situated at Min-nan-thu village near Pagan, Monsieur Duroiselle has discovered a series of well-preserved and admirably executed frescoes, to which, apart from their artistic merit, a special value attaches from the fact that they are frankly Mahayanist and Tantric in character, and that they go far to support the view that a form of northern (Mahayanist) Buddhism was already established at Pagan before the introduction of the southern (Hinayanist) school, which followed upon the conquest of Thaton by Anawrata in the middle of the 11th century A. D. In the Paya-thon-zu temple the Bodhisattvas are depicted embracing their *saktis* or female counterparts. "Some," says M. Duroiselle, "are standing with one *sakti* on each arm, others are seated with one wife on one knee or two, one sitting on each knee. Some figures have four and others six arms. A striking feature of these frescoes is that they are directly derived from the Nepalese and Varendra schools of painting. There are also panels of beautifully executed floral designs and mythological monsters." The frescoes in the Nandamanna temple, which are in

even better preservation than those in the Paya-thon-zu, are also Tantric, and some of them indescribably erotic in character. "The Nadamanna, according to an inscription within its precincts, was built by King Alaungsithu in 1248 A. D., which shows that Northern Buddhism in an active form, was still flourishing at Pagan at that date. The monks residing near by in a monastery, some remnants of which are still standing, were not Southern Buddhists; they might possibly be those famous Aris, often mentioned in the histories, but of whom so little is in reality known. The Nandamanna inscription refers to these monks, and it is stated that the people had to furnish them *morning and evening* with rice, beef, betel and a jar of spirits! It is well-known, of course, that partaking of food in the after-noon and drinking spirits are forbidden to Hinayanist monks."

At Min-nan-thu, also, there is another very fine fresco depicting the assault of Mara's hosts on Buddha. The Sambhula temple in which the fresco is found, dates from the middle of the 13th century A. D., and it is probable therefore that the paintings here are approximately contemporary with those in the Nandamanna temple. But their style is said by M. Duroiselle to be very different and to be derived apparently from the Ajanta paintings. "The diversity of the figures pressing in disorder on their onward march, the life infused into the attitude of each of them and the size of the painting, which covers several square yards, make of this fresco one of the most remarkable in Burma."

The late mediæval shrine figured in Pl. II b, in which the *sikhara* crowning the sanctum assumes a somewhat unusual form, was found by Mr. Hargreaves in the jungles between Deogarh and Chandpur in the United Provinces, and the well-preserved statue of Simhanada Lokesvara, reproduced in the following illustration, is one of two Buddhist images which were recovered by the same officer at Mahoba, in the Hamirpur District. Both these images are works of about the 11th century A. D. and both are inscribed, the record in this case stating that it was a gift of one Chehhit-naka, son of Satana, a painter; in the other case, that it was a gift of some relative of the same Satana. At Deogarh, Mr. Hargreaves also made a careful examination of the well-known Gupta temple, and discovered that it stands on a lofty plinth, of which more than four feet have hitherto been concealed beneath the ground. In the Fort, too, at the same place, he was fortunate in finding a number of valuable epigraphs and a particularly fine image of the Boar Incarnation of Vishnu, which challenges comparison with the well-known one in the Udayagiri Cave at Besnagar.

United Provinces.

In the Gwalior State Mr. M. B. Garde has come upon several monuments hitherto unknown to us. One of these is a temple situated near the village of Kherhat some three miles west of Atter, which according to Mr. Garde dates from the 10th or 11th century A. D. It consists of a single sanctum surmounted by a *sikhara* of the ordinary 'Indo-Aryan' type, but it derives especial interest from the fact that it is constructed throughout of well-baked and finely cut bricks, sparsely adorned on the outside with *chaitya* arches of the conventional type and originally finished with a thin coat of plaster. Another temple of much the same form stands near the village of Dang in the Bhind District, but in this case the body of the temple is of stone and only the *sikhara* of brick. On the lintel over the doorway is a figure of Garuda canopied beneath a double *chaitya* arch, and on the frieze above the lintel are some unusual carvings

Gwalior State.

illustrating scenes from the life of Krishna. A third discovery of value made by Mr. Garde, is a round temple perched on the top of a solitary hill at Mitavli, about two miles to the east of Padhavli. It consists of a circular enclosure with a diameter of rather more than 120 feet, decorated on the outside with ornamental pilasters and sculptures. On the inside of the wall are 65 cells, and in the centre of the enclosure is a round shrine with a *maṇḍapa* attached, the whole resembling in its general features the Chousat Jogini Temple at Bheraghat. Locally, the Mitavli Temple is known as *Ekottarāśa* (i.e. 101) the tradition being that there were 101 Siva-lingas enshrined in the cells. The original building dates from about the 11th century A. D., but from an inscription incised on one of the slabs of the shrine floor it appears to have been repaired during the reign of Virama, the Tomara Chief of Gwalior who was reigning in the early part of the 15th century.

*Museums and
minor Antiquities.*

An Annual Report on the Archaeological Section of the Indian Museum, Calcutta, was submitted as usual to the Trustees by the Officiating Director General of Archaeology, and is reprinted among the appendices at the end of this report. It will be observed from it that the improvements in the exhibition galleries which I foreshadowed last year have been carried out under the able superintendence of Mr. Percy Brown, Director of the Art School, and that much other useful work has been done in the galleries, especially by Pandit B. B. Bidyabinode, the Gallery Assistant. In other museums such improvements as were feasible in the present financial conditions, were made with a view to enhancing the utility and popularity of the collections. At Lucknow, classes in archaeology were regularly held by the Curator. At Peshawar, the hours of opening and closing were adjusted so as to suit better the convenience of the public at different seasons of the year, and one afternoon a week was reserved for Zenana ladies. At this museum, too, good progress was made in the cleaning and classification of the coin collections, and steps were taken by the Superintendent for the better preservation as well as for the systematic classification of the numerous objects stored in the godowns in the museum. The question of accommodation in the museums both at Peshawar and at Muttra becomes more and more acute with the rapid increase in the collections, but nothing, I fear, can be done in either case to relieve the congestion or to increase the educational facilities in the museums until funds are available for adding to the building; and this, needless to say, is not likely to happen until after the war. At Sarnath some new godowns were provided for excavation material which have already proved very useful, and at Lahore the building of the new gallery, which is intended for the temporary housing of Sir Aurel Stein's Central Asian antiquities, was finished, but for the reasons explained below it will be some time before the galleries can be furnished and the collections exhibited to the public.

*Fresh
acquisitions.*

Thanks in part to the scarcity of tourists in India during war time, and thanks still more to the exceptionally rich results obtained by exploration, the new acquisitions made this year for the museums have been more than usually abundant. Foremost among them is Sir Aurel Stein's amazingly interesting collection made during his last journey through Central Asia. This collection (which, I may mention, was transported from Central Asia in 182 packing cases weighing over 21,000 lbs. in all), comprises many thousands of manuscripts in Sanskrit, Chinese, Tibetan, Khotanese,

Kuchean, Sogdian, Uigur, and Turki, paintings on silk, linen and paper; embroidery, brocades, damask and other textiles; painted frescoes; stucco ornaments; wood carvings; coins; intaglio gems; wearing apparel; and a large number of miscellaneous objects for public and private use. The manuscripts have gone to London, as it is there only that Sir Aurel Stein can secure the collaboration of European savants indispensable for their adequate publication; the rest of the collection is to be housed, for some time at any rate, in the Lahore Museum, but it cannot be exhibited there until the explorer himself returns from Europe and supervises the somewhat delicate operation of unpacking the antiquities. The Lahore Museum has also been enriched by numerous other accessions, including 23 pieces of jewellery and metal figures from Taxila and 30 miscellaneous objects from Tibet—all loaned by the Director General of Archaeology; and 29 pieces of Graeco-Buddhist sculptures, including some admirable statuettes and reliefs, kindly presented by Colonel R. W. Macleod. With the exception of the articles mentioned above, which have been loaned to Lahore, the antiquities from my excavations at Taxila are being retained at the site itself, so that they may not lose interest and value, by being detached from their natural surroundings. For the present they are housed merely in store rooms, where the facilities for viewing them are necessarily very limited; but eventually it is intended to establish a local museum on the site, just as was done in the case of Sarnath, Bijapur, Mandalay and other ancient sites. Of other acquisitions made during the year the following are the most noteworthy:—At the Prince of Wales Museum, Bombay (which is now being used as a war hospital) (a) an extensive and highly interesting collection of antiquities purchased by the Local Government from Mr. Purushottam Vishram Mavji and consisting of old Indian pictures, maps, cloths, embroideries, arms and coins; (b) a valuable selection of the hoard of Kshatrapa coins discovered at Sarvania in the Banswara State; (c) three unique inscriptions in Semitic characters found by Colonel Jacob near the *Chhatris* of the former Raos of Cutch and generously presented by the finder; (d) a carved stone taken from the Turkish Custom House at Bastah presented by Lieut.-Gen. Sir Arthur Barret; and (e) various pictures, mainly of local celebrities, which were formerly in the Residency of Baroda. At the Peshawar Museum, pictures of Mahanajas Karak Singh and Naunehal Singh and an inscribed pedestal from Jamalgathi, which, on examination, proved to be a missing portion of sculpture No. 501, which is already in the museum. At the Lucknow Museum, the important copper plate recovered by Pandit Hirananda Sastri at Kasia during his excavations in 1911, and a dated stone inscription of the reign of the Maukhari King, Isana-varman—the only dated record of a Maukhari prince yet known. At the Delhi Museum, various plans relating to the Delhi Darbar of 1911 and arms belonging to the late Sardar Ayub Khan, presented by the Government of India.

Of the many coins and other antiquities secured by Government under the provisions of the Treasure Trove Act the following are deserving of special mention:—

- (1) A hoard of 60 gold coins of Samudra Gupta and the later Kushans. From the Hissar District, Punjab.
- (2) A hoard of 104 silver coins mainly of the early Sultans of Bengal comprising many rare issues. From Bara Rajpur in the Khulna District.

Treasure Trove.

- (3) A hoard of 131 coins chiefly of Muhammad Shah, with 2 of Farrukhsiyar, 2 of Aurangzeb, and 1 of Alamgir II. From Kaliganj in the Khulna District.
- (4) 14 metal images from the Salem, Tanjore and Ramnad Districts.
- (5) 6 stone images from the Tanjore District.
- (6) A metal image of Vishnu of good workmanship from Birat in the Rangpur District.
- (7) Two architectural fragments and four stone images of Simhanada Lokesvara, Tara, Avalokitesvara and Buddha. From the Hamirpur District. *Vide* page 17 *supra* and Pl. II c.

Epigraphy.

Of the epigraphical work accomplished during 1915-16 the following account is furnished by Rao Sahib H. Krishna Sastri, officiating Government Epigraphist :—

“ Five parts of the *Epigraphia Indica* (Nos. III to VII of volume XII) were issued during the year under review. The earliest records published are four inscriptions from Manikials, Hashtnagar and Sanchi, three of which are in the Kharoshthi alphabet and one in Brahmi. Next in chronological order comes the Mandasor inscription of Naravarman, which is dated in the Malava year 461 (A.D. 404-5). Mahamahopadhyaya Pandit Haraprasad Sastri, who edits this record, connects it with the Susunia rock inscription and the Mehruli pillar inscription of Chandra or Chandravarman and distinguishes the latter from the Gupta emperor, Chandragupta II, with whom he has hitherto been identified. The editor recognises Naravarman and his ancestors as the Varman kings of Malava, of whom Chandravarman, a contemporary of Samudragupta, was apparently the most famous. Another important item in the Mandasor inscription discussed by Mr. Haraprasad Sastri is the significance of the term *Krita*, which according to his supposition indicates the name of the first of a cycle of bissextile years of the Vedic period repeatedly used by the Malava tribe. Dr. Bhandarkar, however, thought that it was the name of all the years of (Vikrama) Era, used in the inscription. A new Gupta inscription discovered during the year under review at Nagari in the Udaypur State, by Mr. D. R. Bhandarkar, is noticed in the sequel and will be found to throw some fresh light on the method of dating adopted in the Mandasor and other connected records. Incidentally, Mr. Haraprasad Sastri refers to the existence of a king named Vikramaditya in the 1st century B.C., after whom the Malava-Vikrama Era might have been so called.

“ The publication of the Pyu inscriptions by Mr. C. O. Blagden has already been referred to in the Epigraphical review for 1914-15. His first contribution appears in Part III of Volume XII, and is full of information and suggestion. Though mostly tentative, his readings and translations can safely be accepted as a working hypothesis by scholars who may follow the same line of research. Mr. Blagden recognises in these records on funeral stone urns the names of three kings called Harivikrama, Siavikrama and Suriyavikrama, and, presuming the years quoted in the records to refer to the Burmese Era of A.D. 638, he comes to the conclusion that these kings of the Vikrama Dynasty of Prome might have been ruling about the end of the 7th century A.D.

“ The Hansot plates published by Dr. Sten Konow belong to a hitherto unknown branch of the Chahamanas of Broach and are dated in the 8th century A.D. A possible

relationship between these and the contemporaneous Maitrakas of Valabhi is strongly suggested by the surname Dhrubhata (same as Dhruvabhatta), which was held by Siladitya VII of the latter family and also by the father of Bhartrivaddha II, the donor of the Hansot plates. In an interesting discussion regarding Bhartrivaddha's overlord Nagavaloka, Dr. Konow, following Mr. Bhandarkar, identifies him with the early Nagabhata of the Imperial Pratihara dynasty, who is known to have defeated the Baluchas, as stated in the Gwalior *prāśasti* of Bhojadeva.¹ To about the same period belong the Ramatirtham plates of Indravarman, of the Vishnukundin family, edited by Professor Hultzsch and three other South Indian inscriptions, two of which come from the rock-cut cave at Dalavanur in the South Arcot district, and one from Kudimiyalai in the Pudukkottai State. The Dalavanur epigraphs record the construction of the shrine by the Pallava king Satrumalla Mahendravarman I surnamed Narendrapottaraiyan, and the Kudimiyalai record is a musical treatise of great interest and importance to the history of musical literature in India. The seven sections, corresponding to the seven classical *rāgas*, into which the inscription is divided, the grouping together of musical notes in fours, the use of dots over letters, apparently for marking notations, and the arrangement of sub-sections according to the position of the ending note in the Hindu gamut, make the discovery of the Kudimiyalai record, indeed a valuable one. It would be the only treatise of the kind on noted music, prior to Sarngadeva's *Saṅgitaratnākara*. Rao Bahadur P. R. Bhandarkar, B.A., has dealt with this scientific record in a scholarly manner and suggests that the music in the inscription, as the title indicates, must have been intended for the Indian lute. It is noteworthy that the composition of this musical treatise was that of a king, pupil of a certain Rudracharya. The notation used in the inscription still remains unexplained.

"Dr. Barnett edits two records of the Western Chalukya king Vikramaditya VI viz., the Yewur inscription, and the Nilgunda plates, together with the Miraj plates of Jayasimha II. These supply a complete genealogical account of the Chalukyas, which, compared with what is stated of them in the Kaauthem plates, suggests certain emendations and alterations which the editor has fully noticed. Contributions by the same author on other Kanarese inscriptions from Yewur (besides that of Vikramaditya VI) form the commencement of a series of Kanarese epigraphs published systematically in the *Epigraphia Indica*. Several old Kanarese words, or rather forms of words which are not found in Kittel's Dictionary, are collected together and commented upon. These must necessarily prove to be of immense value for the proper interpretation of Kanarese records. A postscript of valuable notes added by Dr. Fleet to Dr. Barnett's papers accounts for the existence of the Alihayas or the Haihayas in the Chalukya-Rashtrakuta dominions, as a result of matrimonial alliances between these families and the Kalachuri kings of Chedi. Important identifications of geographical names form a special feature of Dr. Fleet's contribution. He identifies *Kirudore* (the little river) with the Tungabhadra by way of contrast with *Perdore* (big river), which is a well-known name of the Krishna. The Ededore country mentioned in the Yewur inscriptions has similarly been identified with that tract of country between the rivers Krishna and Tungabhadra, which forms the major part of the present Raichur district in the Nizam's Dominions.

¹ A.S.R. for 1903-4, p. 277 ff. and *Ind. Ant.* Vol. XI, p. 240 and note.

Idaiturai-nadu, which the great Chola king, Rajendra-Chola I, is said to have conquered in his fight with Jayasimha II, was till now identified with the small Yedatore taluka on the river Cauvery, in the Mysore district. Dr. Fleet has now conclusively proved that Idaiturai-nadu of the Chola inscriptions could be no other than the Edadore, mentioned in the Yewur inscriptions. In the wake of this important identification Dr. Fleet further suggests that Koppam, Kudal-Sangam and Karandai, mentioned in Chola records in connexion with the continuous conflict between the Cholas and the Western Chalukyas, must be the same as Khidrapur, the confluence of the rivers Krishna and Panchganga and Inchal-Karanji—all in the vicinity of each other, not far from Kolhapur.

" Rai Bahadur Hira Lal edits the Khairha plates of the Chedi king Yasahkarnadeva. We are informed that this king came to the throne, abdicated by his father Karna, in A.D. 1073. Yasahkarna's grandfather Gangeyadeva is stated to have defeated and restored the king of the Kuntala country¹ and to have died at Prayaga (Allahabad) with his one hundred wives. Yasahkarna's father, Karna, acquired the title Trikalingadhipati by his conquest of Kalinga. Yasahkarna, himself, extirpated the ruler of Andhra, entered his kingdom and worshipped the latter's own god, Bhimesvara, near Godavari. Mr. Hira Lal identifies Bhimesvara with the famous temple of Draksharama on the bank of the tank Sapta-Godavari. In his remarks on the long list of imprecatory and minatory verses found at the end of the Khairha plates Mr. Hira Lal calls attention to the curious coincidence of the very same sentiments regarding the continuance of a grant that existed in England during the reign of Ethelbert, king of Kent, in 740 A.D.

" The Motupalli pillar inscription edited by Professor Hultzsch belongs to the time of the Kakatiya king, Ganapatideva, and supplies a genealogical account of his predecessors. It reveals for the first time the name of an earlier Prola and, unlike other inscriptions, registers an edict assuring safety to foreign traders by sea whose vessels might be wrecked on the coast of Ganapati's dominions. While formerly the whole cargo of such ships became forfeited to the State, king Ganapati declared that henceforth nothing but the custom duties (*kupa-sulka*) would be levied on it. Motupalli, where this Charter was found, is called Mutili by the Venetian traveller Marco Polo, and seems to have been the chief port for foreign merchandise in the Kakatiya kingdom in the 13th century A.D. Two records of Dikpaladeva of the 18th century A.D. connect this Bastar chief with the Kakatiyas of Warangal and refer to a ceremony called *Kutumbayatra* in which thousands of buffaloes and goats were sacrificed. The documents, curiously enough, speak of the Kakatiyas as the descendants of Pandava Arjuna, of the lunar race, though according to their own records they belonged to the solar race.

" Other inscriptions of interest published in the parts of the *Epigraphia Indica* under review, are the Bhandup plates of Chhittarajadeva, of A.D. 1026, and the Rampal copper plate inscription of Srichandradeva. The latter brings to light a new line of Bengal kings called Chandras, who were Buddhists. All that can at present be said of any possible Chandra king ruling Eastern Bengal in the 11th century A.D. is found

¹ In the verse which refers to this event, Vikramaditya has been taken both by Professor Kielhorn and by Mr. Hira Lal to refer to Gangeyadeva. But the subject of the defeat, viz., the Kuntala king, was evidently Vikramaditya V (A.D. 1009 and 1011).

in the reference to a certain Govindachandra in inscriptions of the Chola king, Rajendra-Chola I. It is stated of this Govindachandra that he was the ruler of Vangala-desa (Bengal), and that he made good his escape when the Chola king Rajendra-Chola I invaded that country.

" No epigraphical discoveries were made in the Frontier Circle and no inscriptions on stone or metal were acquired for the Archaeological Section of the Indian Museum, Calcutta, during the year 1915-16. The only two important documents added to the Epigraphical Section of the Provincial Museum at Lucknow are the Kasia copper-plate published by Mr. Pargiter in the Archaeological Annual for 1910-11, pages 73-77, and the Maukhari stone inscription of the reign of Isanavarman, which is under publication in the *Epigraphia Indica*. In the Eastern Circle were discovered the Bhandak plates and four other copper-plate grants found among the effects of the late chief of the Baud State. The former, which belong to the time of the Rashtrakuta king Krishna I, surnamed Akalavarsha Subhatunga, will soon be published in the *Epigraphia Indica* by Dr. V. S. Sukthankar, M.A., Ph.D. The plates are dated in the Saka year 694, roughly corresponding to A.D. 772. Two of the latter are the grants of Ranabhanjadeva published by Mr. R. D. Banerji on pages 321-328 of the *Epigraphia Indica*, volume XII. The third is also a grant of Ranabhanja, whose predecessors Satrughan and Silabhanja are mentioned in the body of the record. These latter register the grant of the village Vahiravada to a certain Vijaesura, in the twenty-second year of the victorious reign of the king. The grant was incised by the goldsmith Sivanga, the son of Pandi, who also wrote the second inscription of Ranabhanja in his twenty-sixth year, published by Mr. Banerji. The fourth is a new copper plate of a king named Somesvara, who is stated to have been a member of the solar race and of the Chola family. The eulogistic passage describing the king connects him with Chandradityadeva (also called Challa-maraja?) and makes him the lord of the whole Kosala country. He made a grant of the village of Vaniyavenna, in the district Charoda-vishaya, to two Brahmans, in the year read tentatively as Samvat 502. On paleographical grounds the record may be roughly attributed to the 11th century A.D. Chandraditya mentioned here as the second ascendant of Somesvara may have been identical with Chandraditya of the solar race mentioned in the Madras *Epigraphical Report* for the year 1909, page 112.

" The Superintendent, Rajputana Museum, Ajmer, reports the acquisition of three inscribed stones and one copper-plate grant for that museum, and mentions also four others which were copied and examined by him during the year. One of the former, which comes from Nagari, seven miles north of Chitorgarh, in the Udaipur State, is dated in the Malava-Samvat 481, Kartika su. di. 5, and mentions the *Krita* year, as in the Mandasor inscription of Naravarman noted above. Mr. D. R. Bhandarkar, who discovered the stone, also sends his remarks on the mention of *Krita* in this inscription in the sense of Vikrama, but does not refute the interpretation put upon it by Mahamahopadhyaya Pandit Haraprasad Sastri. In the word *Malava-pūrvāyām*, which qualifies *pañchāyām* of the inscription, Mr. Bhandarkar finds a clear proof that the Malavas had their own peculiar system of reckoning the *tithi* of the *Krita* year, and that that method of computation affected not only the *tithi* but even the years. Another record of the Ajmer Museum is an inscription from Partabgarh which belongs

to the reign of the imperial Pratihara king Mahendrapala II, who is not mentioned by Professor Kielhorn in his list of the Imperial Pratiharas. Up to Mahendrapala I the genealogical account given by the Partabgarh inscription agrees with what is supplied by the copper-plate grants (hitherto supposed to belong to chiefs different from the Imperial Pratiharas). The Partabgarh record mentions Vinayakapala the second, son of Mahendrapala by queen Dehadevi (and not Mahidevidevi, as Kielhorn has it). Vinayakapala's son from Prasadhanadevi was Mahendrapala II. This important record has again been thoroughly examined by Mr. Bhandarkar, and Rai Bahadur Gaurishankar Ojha, Superintendent of the Rajputana Museum, has submitted a paper on it for publication in the *Epigraphia Indica* through the Director General of Archaeology. The epigraph divides itself into four parts, of which the first is the grant by Mahendrapala II. Mr. Bhandarkar, from a study of the inscription, proves also that the Pratiharas of the copper plates and of the stone inscriptions are identical, and that consequently the numerical symbols used in the copper plates have to be interpreted differently from what has been done by Dr. Fleet and Professor Kielhorn. The suggestions made by Mr. Bhandarkar in this respect perfectly satisfy the needs of chronology, but have to await further confirmation. For, it may be noted that in the copper plates, after the letter *sro*, which Mr. Bhandarkar interprets as 100, occurs another symbol, which is given in Bühler's Paleographical plates and Tables, No. IX, as the symbol for 100, though it may apparently denote only 9. The symbol *tri*, which is taken by Mr. Bhandarkar to be 3, is given in the same table for 10. The village Kharparapadraka near Ghontavarshika, granted to the goddess Vatsayakshini by Mahendrapala II, is identified with Kharot near Ghotarsi, in the vicinity of Partabgarh. The second and the third parts of the inscription record grants made, respectively, to a Sun temple at Ghotarsi, called Indraditya, by a local Chahamana chief, and of a field to the same temple by Bhartripatta II, of the Guhilot dynasty, in Samvat 999. The fourth part of the record registers three minor grants. The third of the stone inscriptions, reported upon by the Superintendent of the Ajmer Museum, is a small piece of the first (missing) slab of the *Harakeli-nātaka* of Vigraharajadeva, found at the Arhai-din-ka-jhonpra at Ajmer, and noticed by Professor Kielhorn on page 210 of the *Indian Antiquary*, volume XX.

" No less than sixty-six inscriptions were copied in the Gwalior State, most of which have already been noticed by Sir A. Cunningham. Mr. M. B. Garde mentions two important Pratihara copper plates (dated A.D. 1220 and 1247), which were discovered by him at Kuretha (Kudavathe) on the Chambal (Charmanvati). These belong to the kings Malayavarman and his younger brother, Nrivarman, respectively. Coins of the former have been noticed by Sir A. Cunningham in his *Archaeological Survey Report*, Volume II, page 314. The reference to the conquest of the Mlechchhas (Muhammadans) by the father of Malayavarman, his own conquest of Gopagiri (Gwalior) mentioned in the first of these grants, and the grant of the village Gudha by Nrivarman in A.D. 1247, make it appear that the rule of the Pratihara dynasty of Gwalior survived for sometime the subjugation of this fortress by Altamish, in A.D. 1232. Both the plates will be shortly published in the *Epigraphia Indica* by Mr. Garde.

" Mr. Hargreaves, in the Northern Circle, reports that twenty inscriptions were copied during the year in that Circle. It is interesting to note that two inscribed

images discovered at Mahoba are beautiful representations of Simhanada-Avalokitesvara and the goddess Tara. These are assigned to the 11th century A.D. and are ascribed to a son and relative, respectively, of the painter Satana.

" In addition to his remarks on the Gupta and the Partabgarh stone inscriptions of the Ajmer Museum already referred to, Mr. D. R. Bhandarkar, Archaeological Superintendent, Western Circle, reports on two Valabhi copper plates examined by him for the Curator of the Barton Museum, Bhavanagar, and of four other copper-plate grants exhibited by the Gujarat Sahitya Parishad. The Valabhi plates belong to kings Siladitya III and his son Siladitya IV. These supply for the former a date three years earlier than the earliest date known so far, *viz.*, Gupta-Valabhi 350, and for the latter a date five years later than his latest known date, *viz.*, Gupta-Valabhi 382. Of the Gujarat Sahitya Parishad exhibit one was the Hansot plate of Bhartrivaddha II published by Dr. Sten Konow, and another was the Surat copper-plate charter of the Chaulukya Kirtiraja of Latadesa, which is dated in Saka 940, and has been noticed by the late H. H. Dhruva in the *Vienna Oriental Journal*, Volume VII, page 88. The remaining two were found to be new and were issued by the Solanki chief Karnaraja, being dated in A.D. 1075, one quoting the Vikrama-Samvat year and the other the Saka-samvatsara.

" In Burma, the year under report has yielded but few new inscriptions and none containing historical data of any importance. Mr. C. O. Blagden has progressed very satisfactorily with the difficult work of deciphering and translating the Talaing inscriptions found in Burma, and has, as already noted, published notes and provisional translations of some Pyu inscriptions in the *Epigraphia Indica*. The Burmese portion of the Pagan Myazedi inscription has been translated, and M. Duroiselle, Epigraphist, Burma, remarks that the decipherment of this inscription has contributed to the development of a scientific transliteration of the Burmese alphabet which as yet had not been attempted. Some errors in Phayre's *Burmese History* with respect to the accession of four kings, have been corrected with the help of the Myazedi inscription. Other small epigraphical discoveries of interest in Burma are said to be a number of votive tablets with inscriptions in North-Indian characters of the 11th century A.D., and a large number of frescoes from an old temple at Pagan, which represent the Buddha in the preaching attitude and bear labels of a few words in Talaing, giving in each case the name of the *sutta* taught by the Buddha.

" The collection of inscriptions in the Southern Circle has been the largest on record. Seven copper plates were examined, 450 villages inspected, and 835 stone inscriptions copied. A new Andhra inscription discovered at Myakadoni in the Bellary district, belongs to the 8th year of (Pulamavi II), the king of the Satavahanas. The mention of the dynasty by the name Satavahana appears but very rarely in allied records of the Andhras, and this special feature makes the discovery an important one. Dr. V. S. Sukthankar, M.A., Ph.D., has forwarded a contribution on this new Andhra inscription for publication in the *Epigraphia Indica*. Two important Pallava plates in Sanskrit of about the 6th century A.D. were discovered in the Guntur District. The first is dated in the 33rd year of the reign of Maharaja Vijayaskandavarman, and in the 3rd fortnight of the Hemantapaksha. This method of citation of date suggests that these plates are nearer in point of time to the Pallava Prakrit records than to the later Sanskrit

charters. Hence it has been presumed that the newly discovered plates must be the earliest of the Sanskrit series, and that Vijaya Skandavarman must be the same as Skandavarman II of the Pallava genealogy supplied by the Urupavalli plates. A Pallava temple and inscription at Panamalai, in the South Arcot district¹, was brought to notice by Professor Dubreuil of Pondicherry. The record is a *prajasti* of Rajasimha II, who was the builder of the famous Kailasanatha temple at Conjeeveram. A rock-cut temple and record in the same district introduce a new Pallava king, named Chandraditya. Vayiramegan referred to in Tamil literature appears now for the first time as the name of a ruling Pallava king, who may roughly be placed in the 9th century A.D.

" Of the very large number of Chola inscriptions copied, the only one of absorbing interest is an epigraph of Vira-Rajendradeva (A.D. 1062 to at least 1067) from Tirumakkudal in the Chingleput district, both on account of its enormous size (55 feet by 13 feet) and its contents. It registers the renewal of a grant to the temple of Maha Vishnu at that place and provides among other things, for a school in which Vedas, Sastras, Grammar, Rupavatara, etc., were studied, a hostel for students and a hospital for sick people. The details supplied about the hospital, such as the appointment of a doctor, a surgeon, nurses, servants and the storing of medicines (of which eighteen are mentioned) so as to last for a year, are worthy of notice. Even the water that was to be supplied to the sick people was obtained from a special source and was scented with cardamom and *khās-khās* roots. This provision from the temple funds for a hospital, an educational institution, and a hostel, clearly indicates the lines on which part, at least, of the charitable funds of a temple are to be directed.

" One of the Pandya stone inscriptions examined by the Madras Epigraphist, enables him to fix the latest possible date, viz., A.D. 1358, September 7, Friday, for the conquest by prince Kampana Udaiyar of the Muhammadans, who had occupied Madura and the surrounding country just before the expansion of the Vijayanagara empire.

" Records of the time of Krishna Raya reveal that this famous Vijayanagar king was born under the asterism Jyeshtha. The celebrated poet-laureate, Alasani Peddana, of his time, is mentioned in one of the records as being entrusted by the king with the government of a district. A valuable historical document from Siddhout, in the Cuddapah district, registers the military achievements of the Matli chief Ananta, who was a powerful subordinate of the Karnata king, Venkata I, and the author of the Telugu book, *Kakustharijayam*, of high literary merit.

" Among the miscellaneous inscriptions collected in the Southern Circle must be mentioned the Kiratarjuna pillar on the Indrakila hill at Bezwada. The ancient name of Bezwada, as given in this inscription, was Pechhevada, while the copper plates refer to it by the name Vijayavada, Vijayavata or Vijayavatika. This unique record, which relates the popular epic story of Arjuna's fight with Siva for securing the weapon *Pāśupata* and is illustrated by sculptures of the various scenes connected with the story, will be published in Part II of this report. Another interesting document is a stone record found at Panamalai, near the historic fort of Gingee. It is dated in A.D. 1692, and registers certain facts which indicate the troublous times when Sivaji, occupying the fortress of Gingee, defeated the forces that were sent against him by Aurangzeb, under Zulfiqar Khan and one of the princes of the Royal family."

¹ Referred to in the *District Gazetteer*, Vol. I, p. 285.

The following is Mr. Ghulam Yazdani's account of the work done in Moslem Epigraphy :—

" In dealing with the materials for the *Epigraphia Indo-Moslemica* I have adhered to the plan, outlined in the Director General's Report for 1911-12, of publishing systematically the epigraphical records of the kings of Delhi. This plan had already been followed by Dr. Horovitz, so far as the earlier Sultans of Delhi, up to Iltutmish, are concerned, and the next issue of the *Epigraphia Indo-Moslemica* will contain all the inscriptions belonging to the reigns of these kings up to 689 A.H. (1290 A.D.), thus bringing to a close the dynasty of the Turks. To render this material as complete as possible, it was necessary to institute a search for new records and fortunately the efforts met with considerable success, as several entirely unknown inscriptions of king Balban have been discovered at Jalali (Aligarh), Farrukhnagar and Budaon. It was also necessary to secure estampages of the known records of the period, which, although they have been published, are scattered through various journals.

Moslem
Inscriptions.

" Another important feature of the year's work was the securing of impressions of all the inscriptions of Gulbargah, the bare readings of which were edited by Lieut.-Col. T. W. Haig in the first number of the *Epigraphia Indo-Moslemica* (1907-8). Some of these records are of great historical value, especially the inscription over the great Mosque in the Fort, which gives the full name and title of the first Bahmani king *الملك العادل بن المنصور*, *Al-Malik Al-Adil*, and once for all dispels of the popular legend connecting the patronymic Bahmani with the caste-name Brahman. As Col. Haig himself observes, the readings of most of these inscriptions were tentative only, and I have now undertaken to republish these records with necessary amendments in a future issue of the *Epigraphia Indo-Moslemica*.

" In the Southern Circle a number of inscriptions were copied at Adoni, once an important fortress on the border of the rival kingdoms of Bijapur and Vijayanagar. One of these records mentions the building of a 'house' by 'Ali 'Adil Shah (1557-80 A.D.) and the remission of taxes on weavers and grocers for a period of twelve years. These people probably helped the king in the erection of the building. This inscription has a counterpart in Canarese.

" Some inscriptions and *sanads* were received for decipherment from the Mysore State through Mr. R. Narasimhachar, the Archaeological Officer there. One of these, relating to Baba Bodhan's shrine, is dated 396 A.H. (1005 A.D.), but judging from the characters the inscription does not appear to belong to that period."

Tours.

The tours of the Archaeological Superintendents are chronicled in their respective Annual Reports and need not be detailed here. My own movements embraced visits to Kashmir, Taxila, Agra, Delhi, Sanchi, Ellora, Hyderabad (Deccan), Madras, Bombay, Jhansi and Gwalior. As in the previous year, I was encamped at Sanchi for nearly three weeks and at Taxila for two months, in order to conduct the extensive works of conservation and exploration which were in progress at those places.

The following publications were issued during the year :—

Publications.

1. Annual Reports of the Director General of Archaeology, Part II, for the years 1911-12 and 1912-13; Part I, for the years 1912-13 and 1913-14.

2. Annual Reports of the Southern, Western, Eastern, Northern, Frontier and Burma Circles, as well as the Epigraphical Report of the Assistant Archaeological Superintendent, Southern Circle, for the year 1914-15.
3. Three Turki Manuscripts, by Dr. Denison Ross.
4. Report of the Archaeological Section, Indian Museum, 1914-15.
5. Indian Archaeological Policy. (A Resolution issued by the Governor-General in Council on the 22nd October 1915.)
6. *Epigraphia Indica*. Index to Volume XI and Parts 3 to 8 of Volume XII.
7. Classified catalogue of books in the Peshawar Museum Library.
8. Classified catalogue of books in the Office of the Superintendent, Archaeological Survey, Frontier Circle.
9. List of measured drawings and tracings in the Office of the Superintendent, Archaeological Survey, Eastern Circle.
10. List of drawings in the Office of the Superintendent, Archaeological Survey, Burma Circle.
11. List of photo-negatives in the Office of the Superintendent, Archaeological Survey, Southern Circle.
12. List of photo-negatives in the Office of the Superintendent, Hindu and Buddhist Monuments, Northern Circle.
13. List of photo-negatives and drawings in the Office of the Superintendent, Archaeological Survey, Frontier Circle.

Library.

668 new volumes including periodicals were added to the Central Library, Simla, of which 201 were obtained in exchange for our own publications, 254 were received as presents and 213 were purchased.

With a view to increase the usefulness of the library, particularly for officers working at a distance from Simla, it was decided to publish, besides the existing *catalogue raisonné*, two additional catalogues, namely : an alphabetical catalogue of authors and an alphabetical catalogue of subjects. For the preparation of these volumes I was fortunate in securing, thanks to the courtesy of the Education Department, the services of Mr. M. N. Basu, Librarian of the Imperial Secretariat, who undertook to do the work during his leisure moments, and actually succeeded in completing both volumes between September 1915 and the close of the financial year.

Photographs.

A list of the photographic negatives prepared during the year is published in Appendix D of this Report. Three sets of prints were prepared, as usual, for record in my office, for the India Office and for the Indian Museum, Calcutta. 2,209 prints in addition were prepared from the negatives preserved in my office for the Archaeological Superintendents and for my own office, in order to make good the deficiencies in our existing collections. 16 prints only were sold to the public.

Personnel.

The post of the Government Epigraphist for India remained vacant, Mr. H. Krishna Sastri holding charge of the current duties of the office and Professor Sten Konow, Ph.D., continuing as Editor of the *Epigraphia Indica*. Mr. Ghulam Yazdani, Superintendent of Archaeology in H. H. the Nizam's Dominions, was appointed Epigraphist for Moslem Inscriptions on 1st August, 1915. The post of the Superintendent, Muhammadan and British Monuments, left vacant by Mr. Sanderson's untimely death, was temporarily held by M. Zafar Hasan until 24th May, 1915, by

Mr. Hargreaves, Superintendent in charge of the Hindu and Buddhist Monuments, until the 26th January, 1916, and thereafter by Mr. Page, Assistant Superintendent, Western Circle, who was appointed officiating Superintendent *vice* Mr. Sanderson. Dr. V. S. Sukthankar, one of the Government scholars, was appointed Assistant Superintendent, Western Circle, on 29th February, 1916. Mr. J. F. Blakiston, Assistant Superintendent, Eastern Circle, was on combined leave out of India for six months with effect from the 7th May, 1915. On his return he joined the Indian Army Reserve of Officers on the 2nd October, 1915. No substitute was appointed in his place and the Superintendent performed the duty of his Assistant in addition to his own. In September, 1915, the Superintendent, Southern Circle, was placed on special duty for a few days to advise H. H. the Nizam's Government on the conservation of the famous Chalukyan temple at Ittagi, in the Lingsagar District. Mr. Krishna Sastri, Assistant Superintendent for Epigraphy, Southern Circle, was on privilege leave for three weeks and eight days, during which time his Assistant Mr. G. Venkova Rao held charge of his office. Mr. V. N. Aiyar, my Excavation Assistant, continued to act for the Superintendent, Frontier Circle, in the absence of Sir Aurel Stein.

The Government Archaeological Scholarships were held by Dr. V. S. Sukthankar, M.A., Ph.D., M. Ghose, M.A., Lachhmidhar, M.A., and Muhammad Hamid, B.A. In Burma, Mr. Pritchard, B.A., resigned the scholarship in June, 1915, and it was subsequently awarded to Maung Hla. Dr. Sukthankar was appointed Assistant Superintendent, Western Circle, on the 29th February, 1916, and relinquished his scholarship with effect from that date. No successor was appointed in his place.

Scholarships.

JOHN MARSHALL,
Director General of Archaeology.

APPENDIX A.

Special grants-in-aid.—The annual grant of one lakh was further supplemented by Rs. 28,390 from which the following grants-in-aid were sanctioned:—

	Rs.
Bombay	8,000
Bengal	8,000
United Provinces	5,000
Punjab	12,000
Burma	8,000
Delhi	25,000
North-West Frontier Province	2,000
Ajmer	500
Dhar and Mandu	5,000
Excavations at Muttra	2,000
Conservation of Jami Masjid, Srinagar	5,000
Library	3,000
Purchase of antiquities	3,000
Exploration and Conservation at Sanchi	12,500
Exploration and Conservation at Taxila	15,000
Publication of Dr. Franke's reports	7,500
Publication of Sanchi Monograph	1,400
Publication of Bakshali Manuscripts	3,100
Examination of Manuscripts from Benares	1,200
Apparatus required for the Archaeological Chemist	750
TOTAL	1,27,950

APPENDIX B.

Expenditure on the Archaeological Department for the year 1915-16.

	Rs.
Southern Circle	19,740
} Archaeology	19,740
} Epigraphy	19,318
Western Circle	32,572
Eastern Circle	36,310
Northern Circle	18,162
} Superintendent, Hindu and Buddhist Monuments	18,162
} Superintendent, Muhammadan and British Monuments	14,519
Frontier Circle	20,586
Burma Circle	33,939
Director General of Archaeology and Government Epigraphists for India and Scholarships	71,701
Sir Aurel Stein's deputation to Central Asia	30,280
TOTAL	2,97,127

Expenditure on conservation, etc., including grants-in-aid from Imperial Revenues.

	Rs.
Madras	29,713
Coorg	957
Bombay	35,769

APPENDIX B—*contd.*

		Rs.
Dhar and Mandu (Central India)		4,843
Abu (Rajputana)		2,500
Ajmer		2,825
Bengal		11,513
Central Provinces		10,988
Assam		2,196
Bihar and Orissa		8,802
Punjab	{ Hindu and Buddhist Monuments	Ra 19,712
	{ Muhammadan and British Monuments	,, 22,736
United Provinces	{ Hindu and Buddhist Monuments	Rs. 10,451
	{ Muhammadan and British Monuments	,, 63,265
		73,736
North-West Frontier Province		2,000
Delhi		65,511
Burma		14,852
Srinagar		5,000
Exploration and conservation at Sanchi		9,500
Exploration and conservation at Taxila		15,000
Examination of Benares manuscripts		1,052
Apparatus required for Archaeological Chemist		750
	TOTAL	3,39,955

Special Charges.

	Rs.
Library	2,981
Antiquities	3,299
Indian Museum	3,000
Director General's Annual Report	4,376
Epigraphia Indica	571
Honorarium to Mr. Cousens	2,000
	TOTAL
	16,227

APPENDIX C.

Drawings and photographs prepared by the Department.

	Drawings.	Photographs.
Southern Circle	(Archaeology	6 220
	{ Epigraphy	4 93
Western Circle		5 73
Eastern Circle		4 149
	Superintendent, Hindu and Buddhist Monuments	.. 197
Northern Circle	{ Superintendent, Muhammadan and British Monu- ments	6 65
Burma Circle		28 163
Frontier Circle		5 158
Director General of Archaeology		9 394
	TOTAL	67 1,452

APPENDIX D.

Photographic negatives prepared in the Office of the Director General of Archaeology in India during the year 1915-16.

Serial No.	Name of Place.	Description.			Size.
1	Sirkap. (Taxila).	Survey plan of Sirkap site containing temple D and blocks E, F and G.			12×10
2	"	Survey plan of temple D			"
3	"	Survey plan of block E			"
4	"	Survey plan of blocks F and G			"
5	"	Survey plan of block P			"
6	"	Coins found in the year 1914-15, First set			8½×6½
7	"	Ditto ditto Second set			"
8	"	Ditto ditto Third set			"
9	"	Seals found in the year 1914-15			"
10a-10d	"	Excavations at Sirkap, panoramic view			12×10
11	"	Ditto ditto general view from the Kunala Stupa			"
12	"	Shrine No. 3, general view from S.-W.			"
13	"	Ditto detail of moulding on plinth from S.-E.			8½×6½
14	"	Ditto votive stupa			"
15	"	Ditto railing on the ground			"
16	"	General view of block B, from N.			"
17	"	Ditto ditto F/, from N.-W.			12×10
18	"	Ditto ditto P/, from N.-W.			"
19	"	Kunala Monastery, general view from the top of the Kunala Stupa.			"
20	"	Kunala Monastery, interior view from N.-N.-W.			"
21	"	Copper mirror (No. 405)			8½×6½
22	"	Copper mirrors (Nos. 517 and 518)			"
23	"	Copper bell (No. 631)			"
24	"	Ditto			"
25	"	Two copper bells (Nos. 1125, 722)			"
26	"	Copper pan (No. 313)			"

APPENDIX D—*continued.*

Serial No.	Name of Place.	Description.					Size.
27	Sirkap. (Taxila).	Copper dish fixed to a steatite one (No. 525), front view	.	.	.	.	$8\frac{1}{2} \times 6\frac{1}{2}$
28	“	Ditto	ditto	ditto	side view	.	“
29	“	Copper lamp (No. 734), copper stand (No. 470) and copper cup (No. 517).	.	.	.	.	“
30	“	Copper objects (Nos. 940, 636, 300, 771, 142)	.	.	.	.	“
31	“	Ditto (Nos. 796a, 401, 1132, 796, 283, 985, 20, 899, 134).	.	.	.	.	“
32	“	Ditto (Nos. 513, 469, 338, 147, 114, 931, 829, 984, 90).	.	.	.	.	“
33	“	Lead dish (No. 293)	.	.	.	.	“
34	“	Crystal casket (No. 1120) ✓	.	.	.	.	“ ✓
35	“	Steatite caskets (Nos. 1016, 509)	.	.	.	.	“ ✓
36	“	Steatite casket (No. 459) and stone dish (No. 920)	.	.	.	.	“ ✓
37	“	Folding iron chair (No. 218)	.	.	.	.	“
38	“	Iron stand (No. 215)	.	.	.	.	“
39	“	Iron objects (Nos. 624, 287, 487, 29)	.	.	.	.	“
40	“	Ditto (Nos. 512, 228, 198, K. M. 9, 225, 969, 146, K. M. 10, 179, 658, 570a).	.	.	.	.	“
41	“	Ditto (Nos. 216, 570b, 658, 294, 215, 732, 196, 461)	.	.	.	.	“
42	“	Ditto (Nos. 444, 215, 95, 38)	.	.	.	.	“
43	“	Ditto (Nos. 878, 22a, 867, 231, 332, 195)	.	.	.	.	“
44	“	Ditto (Nos. 732, 732a, 221a)	.	.	.	.	“
45	“	Ditto (Nos. 614, 732b, 657)	.	.	.	.	“
46	“	Ditto (Nos. 680, 516, 358)	.	.	.	.	“
47	“	Ditto (Nos. 178, 639, 783, 43, 640, 187)	.	.	.	.	“
48	“	Iron bells (Nos. 408, 423) and ring (No. 194)	.	.	.	.	“
49	“	Iron saucer (No. 579) and plate (No. 1116)	.	.	.	.	“
50	“	Iron objects (Nos. 185, 812, 226, 314, 28)	.	.	.	.	“
51	“	Ditto (Nos. 499, 158, 668)	.	.	.	.	“
52	“	Iron rod (No. 216) and sword (No. 473)	.	.	.	.	“

APPENDIX D—*continued.*

Serial No.	Name of Place.	Description.			Size.
53	Sirkap. (Taxila).	Circular limestone plaque (No. 841)	.	.	8½×6½
54	"	Clay capital of a pillar (No. 348) and steatite umbrella (No. 782).	.	.	"
55	"	Ivory female figure (No. 37), ivory handle (No. 515) and bone object (No. 813).	.	.	"
56	"	Shell plate (No. 377), horn (No. 166) and ivory hair pin (No. 370).	.	.	"
57	"	Terra-cotta tank (No. 718)	.	.	"
58	"	Ditto (No. 715)	.	.	"
59	"	Carved brick (No. 876) and terra-cotta mould (No. 880)	.	.	"
60	"	Terra-cotta objects (Nos. 347, 716, 881)	.	.	"
61	"	Earthen lamps (Nos. 1108, 928)	.	.	"
62	"	Earthen bowl (No. 23)	.	.	"
63a, 63b	Dharmarajika Stupa. (Taxila).	Excavations at Chir Tope, panoramic view from N.	.	.	"
64	"	Main Stupa, general view from N.	.	.	12×10
65	"	Ditto ditto N.-E.	.	.	"
66	"	Ditto ditto S.	.	.	"
67	"	Ditto ditto S.	.	.	8½×6½
68	"	Monnster, ditto S.	.	.	"
69	"	Stupas U ¹ , U ² , U ³ , ditto S.-W.	.	.	"
70	"	Stupa U ¹ , detail view from S.-W.	.	.	"
71	"	Chapel N ¹⁶ , seated Buddha	.	.	12×10
72	"	Ditto, interior	.	.	"
73	"	Ditto, view from W, after repairs	.	.	"
74	"	Ditto N ¹⁷ , view after repairs	.	.	"
75	"	Ditto N ¹⁸ , seated Buddha	.	.	8½×6½
76	"	Ditto, Stucco Buddha	.	.	"
77	"	Ditto, Ditto lower portion	.	.	"
78	"	Ditto N ¹⁷ , ditto ditto	.	.	"

APPENDIX D—*continued*

Serial No.	Name of Place.	Description.	Size.
79	Dharmarajika Stupa. (Taxila).	Stone relic casket (No. 801)	8½×6½ ✓
80	“	Gold ditto ear-rings and beads (No. 801)	“
81	“	Ivory ditto (No. 1593)	“
82	“	Earthen ditto (No. 1429)	“
83	“	Stone lid of relic casket (No. 1429)	“ ✓
84	“	Stone relic casket (No. 1429)	“ ✓
85	“	Beads (No. 1429)	“
86	“	Stucco head (No. 893)	“
87	“	Ditto (No. 1376)	“
88	“	Stucco heads (Nos. 53, 179)	“
89	“	Stucco heads (Nos. 829, 69, 945)	“
90	“	Ditto (Nos. 68, 1563, 458)	“
91	“	Ditto (Nos. 1141, 183)	“
92	“	Ditto (Nos. 1474, 1475)	“
93	“	Ditto (Nos. 360, 1405)	“
94	“	Ditto (Nos. 504, 178)	“
95	“	Stucco figure (No. 54) and stucco torso (No. 1490)	“
96	“	Stucco head (No. 93)	6½×4½
97	“	Stucco hand (No. 815)	8½×6½
98	“	Ditto (No. 226)	“
99	“	Stucco architectural fragment (No. 1227)	“
100	“	Stucco leg (No. 1148)	“
101	“	Terracotta head (No. 950)	“
102	“	Ditto (No. 1037)	“
103	“	Ditto (Nos. 1202, 1126)	“
104	“	Ditto (No. 321)	“
105	“	Kanjur lion's head (No. 30)	“
106	“	Stucco animal head (No. 934)	6½×4½

APPENDIX D—*continued.*

Serial No.	Name of Place.	Description.	Size.
107	Dharmarajika Stupa. (Taxila).	Steatite dish (No. 613)	$8\frac{1}{2} \times 6\frac{1}{2}$
108	"	Stone objects (Nos. 608, 1539, 867)	"
109	"	Ditto (Nos. 364, 205, 1127)	"
110	"	Stone head (No. 1185)	"
111	"	Ditto (No. 881)	"
112	"	Mathura sandstone head (No. 371)	"
113	"	Stone head (No. 1162)	"
114	"	Ditto (Noe. 1381, 674)	"
115	"	Gandhara head (No. 1215), slate stone plaque (No. 1027)	"
116	"	Ditto torso (No. 718)	"
117	"	Ditto head and winged figure (Nos. 673, 1167)	"
118	"	Ditto figures (Nos. 1547, 1470)	"
119	"	Ditto sculpture (No. 1137)	"
120	"	Ditto ditto (No. 1098)	"
121	"	Ditto fragment (No. 1082)	"
122	"	Ditto frieze (No. 1196)	"
123	"	Ditto ditto (No. 963)	"
124	"	Stone lamp (No. 1269)	"
125	"	" bead (No. 1344)	"
126	"	" fragment (No. 1071)	"
127	"	" objects (Nos. 1424a, 1424b)	"
128	"	Gandhara sculpture (No. 1507)	$6\frac{1}{2} \times 4\frac{1}{2}$
129	"	Terra-cotta female with lamp (No. 1561)	$8\frac{1}{2} \times 6\frac{1}{2}$
130	"	Ditto objects (Nos. 1538, 1439, 472)	"
131	"	Ditto lion heads (Nos. 155, 1, 1420)	"
132	"	Ditto objects (Nos. 1212, 1358)	"
133	"	Ditto incense burners (Nos. 383, 835)	"
134	"	Ditto objects (Nos. 1017, 513, 388)	"

APPENDIX D—continued

Serial No.	Name of Place.	Description.						Size.
135	Dharmarajika Stupa. (Taxila).	Terra-cotta objects (Nos. 1100, 1274)	.	.	.	.	.
136	"	Earthen jar with inscription (No. 1257)	.	.	.	.	.	"
137	"	" lamps (Nos. 1565, 431)	.	.	.	.	.	"
138	"	Eleven copper objects (Nos. 812, 676, 1044, 926, 528, 776, 1286, 984, 1514, 1252, 1058).	.	.	.	.	.	"
139	"	Seven copper objects (Nos. 1508, 1555, 617, 1599, 276, 810, 811).	.	.	.	.	.	"
140	"	Eight iron objects (Nos. 876a, 876b, 827, 128, 1111, 400, 588, 546).	.	.	.	.	.	"
141	"	Iron bowl (No. 756) and bell (No. 714)	.	.	.	.	.	"
142	"	Silver and gold caskets (No. 816), agate ring (No. 1376) and copper object (No. 693).	.	.	.	.	.	"
143	Mora Moradu. (Taxila).	Stupa, general view from S.	.	.	.	.	.	12×10
144	"	Monastery, general view from S.	.	.	.	.	.	"
145	"	Ditto and Stupa, general view from S.	.	.	.	.	.	"
146	"	Ditto and part of the Stupa, general view from N.	.	.	.	.	.	"
147, 148	"	Panoramic view of excavations from North	.	.	.	.	.	"
149	"	Ditto ditto ditto South-East	.	.	.	.	.	"
150, 151	"	Ditto ditto ditto North	.	.	.	.	.	8½×6½
152	"	Main Stupa, before excavation, from South-East	.	.	.	.	.	"
153	"	Ditto ditto ditto West	.	.	.	.	.	"
154	"	Ditto after excavation, from North-East	.	.	.	.	.	"
155	"	Ditto ditto ditto South-East	.	.	.	.	.	"
156	"	Ditto ditto ditto South-West	.	.	.	.	.	"
157	"	Ditto ditto ditto N.-N.-W.	.	.	.	.	.	"
158—167	"	Stucco reliefs on south face of Main Stupa, from South	.	.	.	.	.	"
168	"	Stucco reliefs on S.-E. corner of Main Stupa	.	.	.	.	.	"
169	"	Stucco reliefs on South face of Stupa No. II	.	.	.	.	.	"
170	"	Seated Buddha from Main Stupa	.	.	.	.	.	6½×4½
171	"	Ditto ditto	.	.	.	.	.	"

APPENDIX D—*continued.*

Serial No.	Name of Place.	Description.			Size.
172	More Moradu. (Taxila).	Buddha head, stucco, from Main Stupa			6½×4½
173	"	Ditto	ditto		8½×6½
174	"	Two Buddha heads, stucco, from Main Stupa			"
175	"	Ditto	ditto	ditto	"
176	"	Ditto	ditto	ditto	"
177	"	Three Buddha heads, stucco, from Main Stupa			"
178	"	Three Bodhisattva heads, stucco, from Main Stupa			"
179	"	Four miscellaneous stucco fragments, from Main Stupa			"
180	"	Four decorative stucco fragments, from Main Stupa			"
181	"	Monastery, after excavation from West			"
182	"	Ditto	ditto	South-East	"
183	"	Ditto	ditto	South-West	"
184	"	Ditto	ditto	another view	"
185	"	Steps leading to upper storey in Monastery, from North.			"
186	"	Stucco reliefs in Monastery			"
187	"	Ditto	ditto		"
188, 189	"	Ditto	ditto		"
190	"	Ditto	ditto		"
191	"	Stupa in Monastery, front view			"
192	"	Torso of colossal standing Buddha in Monastery			"
193	"	Torso of seated Buddha figure in Monastery			"
194	"	Three pottery objects from Monastery			"
195	"	Seven pottery objects from Monastery			"
196	"	Six pottery objects from Monastery			"
197	"	Nine pottery objects from Monastery			"
198	"	Eight pottery objects from Monastery			"
199	"	Buddha figure from Monastery			"
200	"	Buddha head from Monastery			"

APPENDIX D—*continued.*

Serial No.	Name of Place.	Description.					Size.
201	Mora Moradu. (Taxila).	Two heads of Buddha from Monastery	.	.	.	.	$8\frac{1}{2} \times 6\frac{1}{2}$
202	"	Ditto	ditto	.	.	.	"
203	"	Ditto	ditto	.	.	.	"
204	"	Ditto	ditto	.	.	.	"
205	"	Ditto	ditto	.	.	.	"
206	"	Buddha head from Monastery	.	.	.	.	"
207	"	Three miscellaneous heads from Monastery	.	.	.	.	"
208	"	Four Buddha heads from Monastery	.	.	.	.	"
209	"	Four Bodhisattva heads from Monastery	.	.	.	.	"
210	"	Figures of standing Bodhisattva from Monastery	.	.	.	.	"
211	"	Half length view of same	.	.	.	.	"
212	"	Figure of Bodhisattva Maitreya from Monastery	.	.	.	.	"
213	"	Relievo panel from Monastery	.	.	.	.	"
214	"	Two lamps from Monastery	.	.	.	.	"
215	"	Corinthian capital from Monastery	.	.	.	.	"
216	"	Harmika from Monastery	.	.	.	.	"
217	"	Seal from Monastery	.	.	.	.	"
218	"	Buddha head from Monastery	.	.	.	.	$6\frac{1}{2} \times 4\frac{1}{2}$
219	"	Relievo panel with torso of two standing Buddha figures from Monastery.	.	.	.	.	"
220	"	Copper rosette from Monastery	.	.	.	.	"
221	"	Two copper cups from Monastery	.	.	.	.	"
222	"	Bronze cylinder seal from Monastery	.	.	.	.	"
223	"	Copper <i>trisula</i> from Monastery	.	.	.	.	$8\frac{1}{2} \times 6\frac{1}{2}$
224	"	Three miscellaneous copper objects from Monastery	.	.	.	.	$6\frac{1}{2} \times 4\frac{1}{2}$
225	"	Seven miscellaneous copper objects from Monastery	.	.	.	.	$8\frac{1}{2} \times 6\frac{1}{2}$
226	"	Two iron bells from Monastery	.	.	.	.	$6\frac{1}{2} \times 4\frac{1}{2}$
227	"	Six iron objects from Monastery	.	.	.	.	$8\frac{1}{2} \times 6\frac{1}{2}$
228	"	Nine iron objects from Monastery	.	.	.	.	$8\frac{1}{2} \times 6\frac{1}{2}$

APPENDIX D—continued.

Serial No.	Name of Place.	Description.				Size.
229	Sinsukh. (Taxila).	View of the wall and bastion of fort from S.-E., near view.				12×10
230	"	distance.	Ditto	from		"
231	Bhalar Stupa. (Taxila).	Stupa, view from S.-W.				"
232	"	Ditto	S.-S.-W.			"
233	"	Ditto	E., showing approaching steps and new masonry support.			"
234	"	Ditto	E., showing the approaching step and new masonry support.		8½×6½	
235	"	Ditto	S.-W.			"
236	"	Ditto	S.			"
237	Indian Museum.	Herat Astrolabe (Brass). Face				6½×4½
238	"	Ditto	Disc (1)			"
239	"	Ditto	Disc (2)			"
240	"	Ditto	Disc (3)			"
241	"	Ditto	Venter			"
242	"	Ditto	Back			"
243	Delhi.	Delhi Observatory, after the Daniells, from S.-W.				"
244	"	Ditto	ditto	N.-E.		"
245	"	Ditto	general view (1)			"
246	"	Ditto	ditto (2)			"
247	"	Ditto	Samrat Yantra, from N.-W. (1)			"
248	"	Ditto	ditto	N.-W. (2)		"
249	"	Ditto	ditto	W.		"
250	"	Ditto	ditto	N.-N.-W.		"
251	"	Ditto	ditto	S.-E.		"
252	"	Ditto	ditto	S.		"
253a and 253b.	"	Ditto	general view (3)			"

APPENDIX D—continued.

Serial No.	Name of Plate.	Description.					Size.
254a and 254b.	Delhi.	Delhi Observatory, general view (4)	.	.	.	.	6 $\frac{1}{2}$ x 4 $\frac{1}{2}$
255	"	Ditto	<i>Ram Yantra</i> A, from S.-E.	.	.	.	"
256	"	Ditto	ditto	A, from W.	.	.	"
257	"	Ditto	ditto	B, from N.-W.	.	.	"
258	"	Ditto	ditto	A, Interior (1)	.	.	"
259	"	Ditto	ditto	A, Interior (2)	.	.	"
260	"	Ditto	view from gnomon looking S.	.	.	.	"
261	"	Ditto	<i>Jai Prakash</i> A, from N.-E.	.	.	.	"
262	"	Ditto	ditto	Interior, from N. (1)	.	.	"
263	"	Ditto	ditto	Interior, from N. (2)	.	.	"
264	"	Ditto	ditto	Interior middle portion	.	.	"
265	"	Ditto	ditto	Interior looking S.	.	.	"
266	"	Ditto	<i>Misra Yantra</i> , from S.	.	.	.	"
267	"	Ditto	ditto	N.-W.	.	.	"
268	"	Ditto	ditto	E.	.	.	"
269	Jaipur.	Jaipur Observatory, <i>Ram Yantra</i> A, from S.-E. (1)	.	.	.	.	"
270	"	Ditto	ditto	A, from S.-E. (2)	.	.	"
271	"	Ditto	ditto	B, from S.-E. (1)	.	.	"
272	"	Ditto	ditto	B, from S.-E. (2)	.	.	"
273	"	Ditto	<i>Chakra Yantra</i> , from N.-N.-E.	.	.	.	"
274	"	Ditto	<i>Kapali Yantra</i> , from N.	.	.	.	"
275	"	Ditto	Smaller <i>Somrat Yantra</i> , from S.-W.	.	.	.	"
276	"	Ditto	<i>Nari Valaya Yantra</i> , from S.	.	.	.	"
277	"	Ditto	<i>Jai Prakash</i> , interior looking S.	.	.	.	"
278	"	Ditto	Model of <i>Ram Yantra</i>	.	.	.	"
279	"	Ditto	<i>Rasi Valaya</i> (Capricornus) from S.	.	.	.	"
280	"	Ditto	ditto	ditto	E.-N.-E.	.	"

APPENDIX D—continued.

Serial No.	Name of Place.	Description.				Size.
281	Jaipur.	Jaipur Observatory, <i>Rasi Vakra</i> (Capricornus,) from S.	.	.	6 $\frac{1}{2}$ x 4 $\frac{1}{2}$	
282	“	Ditto	<i>Dakshina-vritti Yantra</i> , from E.	.	“	
283	“	Ditto	<i>Kranti-vritti Yantra</i> , from N.-W.	.	“	
284	“	Ditto	<i>Yantra Raj</i> I (Brass)	.	“	
285	“	Ditto	ditto II (Iron)	.	“	
286	“	Ditto	ditto (I and II together)	.	“	
287	“	Jaipur Persian Astrolabe (a).	Face	.	“	
288	“	Ditto	ditto	Back	.	“
289	“	Jaipur Hindu Astrolabe (a).	Face	.	“	
290	“	Ditto	ditto	Back	.	“
291—293	“	Ditto	ditto	Discs	.	“
294	“	Jaipur <i>Jarakali Yantra</i> , (Persian, dated A. H. 1091)	Obverse.	.	“	
295	“	Ditto	ditto	ditto	Reverse.	“
296	“	Jaipur <i>Yantradhipati</i>	.	.	“	
297	“	Jaipur <i>Dharmabhrama yantra</i> .	Obverse	.	“	
298	“	Ditto	ditto	Reverse	.	“
299	“	Jaipur <i>Sola Yantra</i> (a)	.	.	“	
300	“	Ditto	(b)	.	“	
301	“	Ditto	(c)	.	“	
302	“	Ditto	(d)	.	“	
303	“	Jaipur Astronomical tables.	Page 1	.	“	
304	“	Ditto	ditto	Page 2	.	“
305	“	Jaipur <i>Yantra Raj</i>	.	.	“	
306	“	Jaipur Museum, Jai Singh's portrait	.	.	“	
307	“	Ditto	Astrolabe (b).	Face	.	“
308	“	Ditto	ditto (b).	Back	.	“
309	“	Ditto	ditto (c).	dated A.H. 1067. Face	.	“
310	“	Ditto	ditto (e).	Venter	.	“

APPENDIX D—continued.

Serial No.	Name of Place.	Description.						Size.	
311	Jaipur.	Jaipur Museum, Astrolabe (c).	Back	.	.	.	.	6½ × 4½	
312	“	Ditto	ditto (6).	Venter	.	.	.	“	
313	“	Ditto	Globe attributed to Jai Singh (1)	.	.	.	.	“
314	“	Ditto	ditto	ditto	(2)	.	.	“	
315	“	Ditto	Cylindrical dial	.	.	.	.	“
316	“	Ditto	Statue of Karttikeya, brought from Amber.	.	.	.	.	“
317	Ujjain.	Ujjain Observatory, <i>Dakshina-urtti Yantra</i> from S.-W.	.	.	.	.	.	“
318	“	Ditto	ditto	ditto	East side	.	.	“	
319	“	Ditto	general view from E.	.	.	.	.	“
320	“	Ditto	ditto	S.-S.-W.	.	.	.	“	
321	“	Ditto	<i>Samrat Yantra</i> from W.-N.-W.	.	.	.	.	“
322	“	Ditto	general view from N.-E.	.	.	.	.	“
323	“	Ditto	ditto	S.-W.	.	.	.	“	
324	“	Ditto	<i>Samrat Yantra</i> from W.	.	.	.	.	“
325	“	Ditto	general view from W.-N.-W.	.	.	.	.	“
326	“	Ditto	<i>Dakshina-urtti Yantra</i> , from S.-W. (2)	.	.	.	.	“
327	“	Ujjain Water Palace	.	.	.	.	.	“
328	“	Ditto	.	.	.	.	.	“
329	“	Ditto	.	.	.	.	.	“
330	Benares.	Benares. The Man Mandir, from the river (1)	.	.	.	.	.	“
331	“	Ditto	ditto	ditto	(2)	.	.	“	
332	“	Ditto	ditto	S.	.	.	.	“	
333	“	Ditto	ditto	Balcony	.	.	.	“	
334	“	Benares Observatory, <i>Samrat Yantra</i> , from S.-W.	.	.	.	.	.	“
335	“	Ditto	ditto	from E.-S.-E.	.	.	.	“	
336	“	Ditto	<i>Chakra Yantra</i> from W. (1)	.	.	.	.	“
337	“	Ditto	ditto	from W. (2)	.	.	.	“	
338	“	Ditto	ditto	The Wedge or Foras	.	.	.	“	

APPENDIX D—continued.

Serial No.	Name of Place.	Description.			Size.
339	Benares.	Benares Observatory, <i>Chakra Yantra</i> , <i>Narivalaya</i> and <i>Ram Yantra</i> from N.-W.			$6\frac{1}{2} \times 4\frac{1}{2}$
340	"	Ditto	Perspective drawing of the Observatory made in 1772 or 1773 by Col. Campbell.		$8\frac{1}{2} \times 6\frac{1}{2}$
341	"	Ditto	Perspective drawing of the <i>Samrat Yantra</i> made in 1772 or 1773.		"
342	"	Ditto	Plan and elevation of the <i>Samrat Yantra</i> made in 1772 or 1773.		"
343	Agra.	Moti Masjid, the so-called Sun-dial from S.-W. (1)			$6\frac{1}{2} \times 4\frac{1}{2}$
344	"	Ditto	ditto (2)		"
345	"	Ditto	ditto (3)		"
346	Sanchi. (Bhopal State).	Panoramic view of Sanchi Hill top, from S.-E.			$8\frac{1}{2} \times 6\frac{1}{2}$
347	"	Plan of the hill of Sanchi and its environs			12×10
348	"	Excavations at Sanchi (site plan)			"
349	"	Stupa I, Plan and elevation			"
350	"	Ditto Balustrades, etc.			"
351	"	Ditto Elevation of North Gateway			"
352	"	Ditto ditto East Gateway			"
353	"	Ditto ditto South Gateway			"
354	"	Ditto ditto West Gateway			"
355	"	Stupa II, Plan and elevation			"
356	"	Ditto Balustrades			"
357	"	Stupa III, Plan and elevation			"
358	"	Ditto Balustrades, etc.			"
359	"	Plan and section of temples 17 and 31			"
360	"	Ditto temple 18			"
361	"	Ditto temples 36 and 37			"
362	"	Ditto temple 40			"
363	"	Ditto temples 45 and 32			"

APPENDIX D—continued.

Serial No.	Name of Place.	Description.						Size.
364	Sanchi. (Bhopal State).	Plan and Section of Monasteries 38, 46 and 47						12 x 10
365	"	Details of columns						"
366	Sonari. (Bhopal State).	Stupa I, general view, from N.-E.-E.						8½ x 6½
367	"	Ditto ditto S.-E.						"
368	"	Stupa II, general view, from S.-E.						"
369	"	Ditto ditto N.-E.						"
370	"	Monastery, view from N.-E.						"
371	"	Stupas, ditto						"
372	"	Railing pillars						"
373	"	Ditto						"
374	"	Fragment of railings and coping						"
375	Andher. (Bhopal State).	Stupa I, general view, from S.						"
376	"	Ditto ditto S.-E.						"
377	"	Ditto detail view, from S.						"
378	"	Ditto Ground rail						"
379	"	Ditto ditto						"
380	"	Ditto ditto						"
381	"	Ditto ditto						"
382	"	Ditto ditto						"
383	"	Ditto ditto						"
384	"	Stupa II, general view, from S.-W.						"
385	"	Ditto ditto N.-W.						"
386	"	Stupa III, general view, from S.-E.						"
387	Kansia. (Bhopal State).	Mouth of cave, detail view, from W.						"
388	"	Ditto ditto						"
389	"	Footprints near mouth of cave						"

APPENDIX D—concluded.

Serial No.	Name of Place.	Description.			Size.
390	Kansia. (Bhopal State).	Rock with traces of painting in red.			8½ x 6½
391	“	Stupa in front of Kansia Cave, view from N. W. (1)			“
392	“	Ditto	ditto	(2)	“
393	Miscellaneous.	Bronze female with lamp.	Front view		“
394	“	Ditto	ditto		“

APPENDIX E.

Report of the Archaeological Section of the Indian Museum, 1915-16.

1. *Establishment.*—The undersigned, as Superintendent, Archaeological Survey, Eastern Circle, remained as Sir John Marshall's deputy in charge of the Archaeological Section throughout the year. An addition has been made to the staff of this Section by the appointment of Mr. Percy Brown, A.R.C.A., Principal, Government School of Art, Calcutta, to supervise the exhibition of antiquities in the various galleries.

In the ministerial staff the changes that occurred during the past year are as follows:—Babu B. C. Mukherji, Clerk, officiated for Pandit B. B. Bidyabinod, Gallery Assistant, who was absent on leave for three months and a temporary clerk was entertained in place of Babu Mukherji. Two substitutes, one clerk and a markman were taken during the absence on privilege leave of Babu B. C. Mukherji, Clerk, and Munshi Wahid-ud-din Ahmad, Markman.

2. *Leave.*—Mr. R. D. Banerji was absent on privilege leave from 4th May to 28th June 1915 and again from 24th March to the close of the year under review; Pandit B. B. Bidyabinod, Gallery Assistant, from 1st November 1915 to 31st January 1916; Babu B. C. Mukherji, Clerk, from 26th February to 25th April 1916 and Munshi Wahid-ud-din Ahmad, Markman, from 7th September to 10th October 1915.

3. *Library.*—Eighty books were added to the Archaeological library during the year, the majority being received as presents.

The compilation of the card index of the library books by Pandit B. B. Bidyabinod, which was commenced towards the end of the previous year, was completed during the year under review.

4. *Photographs.*—One thousand four hundred and one photographic prints were received during the year from the different circles of the Archaeological Department as well as from the office of the Director General of Archaeology in India. Above one thousand of these prints have already been mounted in albums and the work is still being continued by Pandit B. B. Bidyabinod.

5. *Galleries.*—(a) In the Gandhara room the old wooden show-cases were replaced by new ones of Mr. Percy Brown's design and the sculptures have been arranged in these by hooking them, by means of galvanised iron wire, to both sides of the iron frame in the centre of the show-cases. This arrangement is highly satisfactory inasmuch as it admits a sufficiency of light and shows the sculptures much more clearly than was possible in the old arrangement. Credit is due to Mr. Percy Brown and Pandit Bidyabinod for the successful way in which this work has been completed.

(b) The furnishing of the new gallery (vacated by the Victoria Memorial Exhibition) with the new show-cases designed by Mr. Percy Brown has been completed; but the gallery is not yet open to the public as the arrangement of the exhibits is still in progress. As yet, Pandit Bidyabinod has completed the arranging of the pre-historic antiquities received from the Madras Museum; the antiquities acquired by Sir John Marshall mostly from Central Asia and offered to this Section for exhibition on loan; the Gupta period bricks and the clay seals presented by the Lucknow Museum; Sir Aurel Stein's antiquities from Khotan; and the antiquities from various places previously acquired for this Section.

APPENDIX E.—*continued.*

(c) Two fine plaster casts were made for the gallery by my modeller, one of the Asoka Lion Capital discovered at Sarnath, Benares, and the other of the Vishnu statue found at Gorakhpur. The first of these is exhibited at the entrance hall of the Museum building with the capitals of its class already there and the other is placed along with the group of Vishnu figures in the Gupta Gallery.

(d) Altogether 1,311 (one thousand three hundred and eleven) specimens were registered by the Gallery Assistant and the numbers marked on each by the markman. The labels for these exhibits are in course of preparation.

(e) In the Bharhut room some of the copings of the Bharhut rail were cracked. This was thought to have been caused by the sinkage of the floor on which the pillars of the balustrade were resting. To ascertain whether the injury was continuing, a number of tell-tales were employed by Mr. Percy Brown in consultation with the Engineers and the result is being watched carefully.

6. *Coin room.*—Mr. R. D. Banerji, the Assistant Superintendent, remained in charge of the Coin room throughout the year. The room was, however, closed during Mr. Banerji's absence on leave in May and June of 1915 and also from January 1916 under orders of the Government of India.

A number of 565 duplicates of Indian Muhammadan coins were sent to the Delhi Museum, as ordered by the Government of India and approved by the Trustees, in addition to those already supplied in the previous year.

7. *New accessions.*—The following additions were made to the Archaeological collections:—

(i) The Lucknow Provincial Museum presented two hundred and forty-three ornamental bricks of the Gupta period and four hundred and ninety-nine inscribed clay seals discovered at Kasia as well as seven pre-historic copper implements (locality unknown).

(ii) Coins.—Altogether 379 coins were added to the cabinet during the year—14 gold, 306 silver, 38 copper and 21 Billon. Of these, three of the gold coins were purchased, the rest being presented by the Governments of Bombay (through the Bombay Branch of the Royal Asiatic Society), Madras, United Provinces, Central Provinces, the Punjab and Assam and also by the Darbars of Bikaner (through the Resident, Western Rajputana States), Rewa, Nagod, Dewas, Orissa Feudatory States and the Archaeological Survey, Western Circle. Mr. C. A. Bush of Calcutta presented four copper coins.

A detailed list of the coins added to the cabinet is given below:—

Names.	Gold.	Silver.	Copper.	Billon.
South Indian Padma tanka	2	...	...	...
South Indian Fanam	1	...	...	...
Ganga Fanam	5	...	...	...
Samudragupta	1	...	...	...
Chandragupta II	2	...	...	...
Shahjahan I	1	3	2	2
Aurangzeb	1	3	4	2
Shah Alam I	1	...	1	2
Akbar I	...	9	2	2
Native State Shah Alam II	...	4	...	2

APPENDIX E—*continued.*

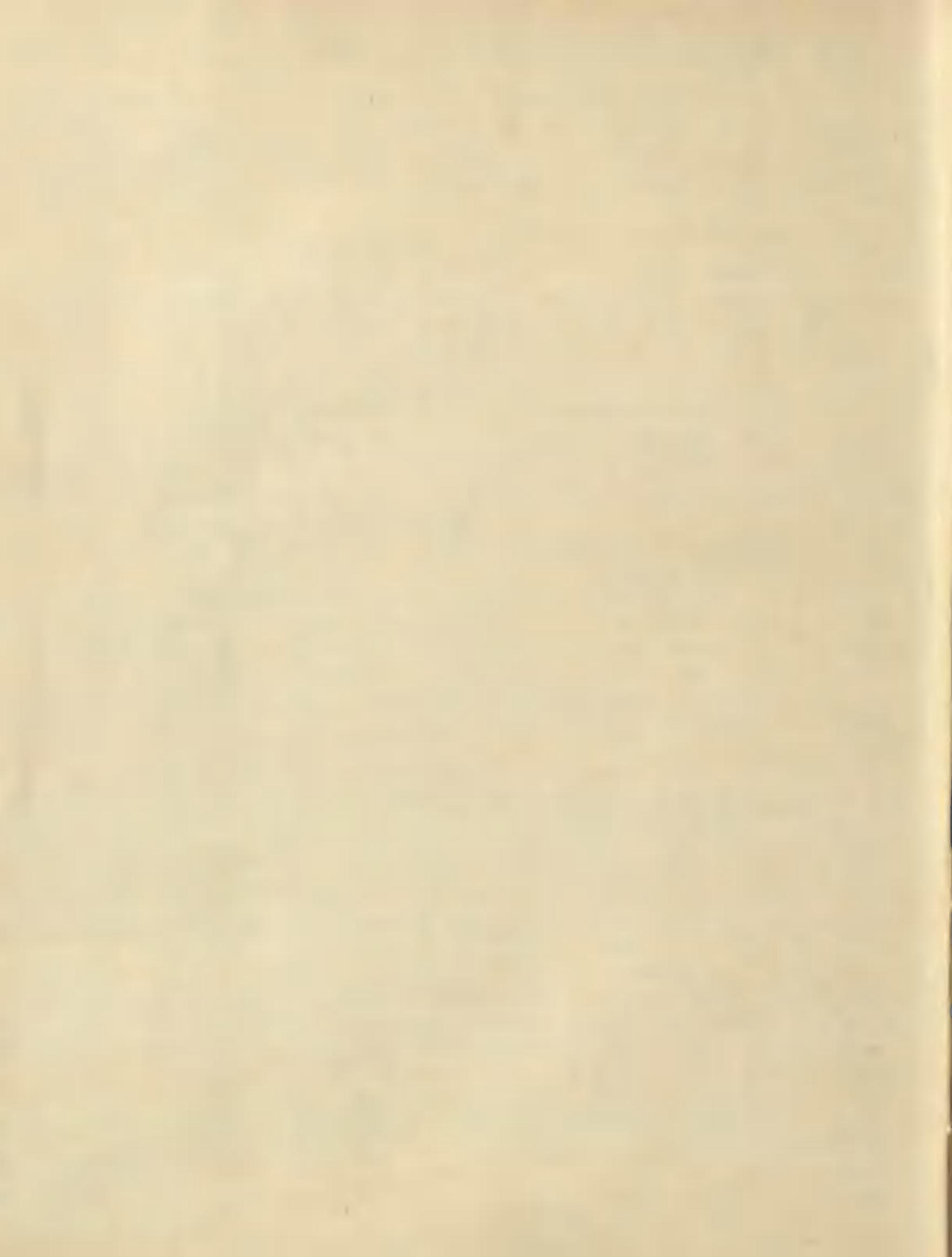
Names.	Gold.	Silver.	Copper.	Billon.
Shah Alam II	85	..	..
Indo-French Shah Alam II	8	..	..
Madanvarman	5	..	..
Furrukhshiyar	2	..	..
Muhammad Shah	15	..	..
Ahmad Shah	4	..	..
Alamgir II	3	..	..
Nasiruddin Haidar	12	..	..
Wajid Ali	3	1	..
Ghaziuddin Haidar	3	..	..
Muhammad Ali	15	..	..
Amjad Ali	65	..	..
Mahmud II of Malwa	4	..	..
Islam Shah	1	..	..
Native States	2	2	..
Timur Shah	1	..	..
Fakharuddin	11	..	..
Shamsuddin Ilias Shah	17	..	..
Mahmud I	25	..	..
Muzaffar II	2	..	..
Sivadas (in Brahmi)	1	..
Dharaghosa (in Brahmi)	1	..
Rudradasa	5	..
Altamash	5	..
Adivaraha	5	..
Muhammad bin Sam	5	..
Akbar	6	..
Mysore Bharapatan	1	..

APPENDIX E—concluded.

Names.	Gold.	Silver.	Copper.	Billon.
Sikandar Lodi	19
Bahlol Lodi	1
Firoz Tughlaq	1
Anonymous	..	4	..	..
Unidentified	5	..
TOTAL	14	306	38	21

I have much pleasure in testifying to the good work done by my staff in the Indian Museum during the past year.

D. B. SPOONER,
Offg. Director General of Archaeology in India.



Honorary Correspondents of the Archaeological Department.

1. Archaeological Commissioner for Ceylon, Anuradhapura.
2. Monsieur M. A. Barth, Membre de l'Institut, 10, Rue Garanciere (Paris VI^e), France.
3. H. C. P. Bell, Esq., late Archaeological Commissioner, Kandy, Ceylon.
4. Sir R. G. Bhandarkar, K.C.I.E., Sangam, Poona, India.
5. C. O. Blagden, Esq., Redcourt, Champion Hill, London, S.E.
6. Hon'ble Mr. R. Burn, Chief Secretary, United Provinces, India.
7. Dr. A. K. Coomaraswamy, The Manor House, Britford, Nr. Salisbury, England.
8. H. Cousens, Esq., c/o Messrs. Grindlay & Co., 54, Parliament Street, London.
9. Lord Curzon of Kedleston, 1, Carlton House Terrace, London, S.W.
10. Director of Archaeology in Netherlands India, Batavia.
11. Directeur de l'Ecole Francaise d'Extreme Orient, Hanoi, Indo-China.
12. Monsieur L. Finot, 11, Rue Poussin, Paris (XVI^e), France.
13. Monsieur A. Foucher, 286, Boulevard Raspail, (XIV^e), Paris, France.
14. Sir George Grierson, K.C.I.E., Ph.D., Rathfarnham, Camberley, Surrey, England.
15. Lieutenant-Colonel T. W. Haig, His Britannic Majesty's Consulate General, Meshed, Persia.
16. Dr. A. F. Rudolf Hoernle, C.I.E., Ph.D., 8, Northmoor Road, Oxford.
17. G. R. Kaye, Esq., Curator, Bureau of Education, Simla.
18. Professor H. Kern, Utrecht, Holland.
19. Professor Sten Konow, Ph.D., Villa Vaikuntha, Bestum, *nið* Christiania, Norway.
20. Pandit Hira Lal Rai Bahadur, Extra Assistant Commissioner, Nagpur, India.
21. Dr. C. R. Lannan, Harvard University, 9, Farrar Street, Cambridge, Massachusetts, U.S.A.
22. Professor Sylvain Lévi, Professor, College de France, Rue Guy-de-la-Braase 9, Paris, France.
23. Major C. E. Luard, Foreign Department, Government of India.
24. Professor A. A. Macdonell, M.A., Ph.D., Lochgarry Lodge, Banbury Road, Oxford.
25. Shams-ul-ulama Jivanji Jamshedji Modi, B.A., Honorary Secretary, Anthropological Society of Bombay, Bombay, India.
26. Mr. R. Narasimhachar, M.A., Officer-in-charge of Archaeological Researches, Mysore, Malleswaram, Bangalore, India.
27. F. E. Pargiter, Esq., 12, Charlbury Road, Oxford.
28. Professor E. J. Rapson, 8, Mortimer Road, Cambridge.
29. Professor T. W. Rhys-Davids, Pali Text Society, Cotterstock, Chipstead, Surrey, England.
30. Mahamahopadhyā Pandit Haraprasad Shastri, 26, Pataldanga Street, Calcutta.
31. Monsieur E. Senart, Membre de l'Institut, 18, Rue Francois 1, Paris, France.
32. R. Sewell, Esq., 31, Bedford Gardens, Campden Hill, Kensington, W., London.
33. Professor Sergius d'Oldenburg, Secretary, Imperial Academy of Sciences, Petrograd, Russia.
34. Vincent A. Smith, Esq., 116, Banbury Road, Oxford.
35. Professor J. Takakusu, Imperial University, Tokio, Japan.
36. Sir Richard Temple, Bart., C.I.E., The Nash, Worcester, England.
37. F. W. Thomas, Esq., India Office Library, Whitehall, London, S.W.
38. Professor M. Van Berchem, Associé étranger de l'Institut de France, 3, Cour Saint. Pierre, Geneva, Switzerland.
39. Prof. J. Ph. Vogel, Ph.D., Leiden University, Leiden, Holland.
40. Dr. A. Vedis, C.I.E., Superintendent of Sanskrit Studies, United Provinces, Benares.
41. Colonel L. A. Waddell, C.B., C.I.E., The Deodars, Park Drive, Hampstead, London, N. W.



*List of Public Institutions, Libraries, etc., to which
copies of Archaeological Survey Report are regularly supplied.*

I.—COUNTRIES OUTSIDE INDIA.

UNITED KINGDOM.

Aberdeen University Library, Aberdeen.	London Library, St. James' Square, London, S.W.
Royal Library, Windsor Castle, Berks.	London University Library, Imperial Institute, London, S.W.
Birmingham University Library.	National Art Library, South Kensington Museum, London.
Bendall Library, Cambridge.	Royal Academy of Arts, Burlington House, Piccadilly, London, W.
Cambridge University Library, Cambridge.	Royal Anthropological Institute of Great Britain and Ireland, 50, Great Russell Street, London, W.C.
National Library of Ireland, Leinster House, Kildare Street, Dublin.	Royal Asiatic Society, 22, Albemarle Street, London, W.
Royal Irish Academy, 19, Dawson Street, Dublin.	Royal Colonial Institute, Northumberland Avenue, London, W.C.
Trinity College Library, Dublin.	Royal Institute of British Architects, 9, Conduit Street, Hanover Square, London, W.
Advocates' Library, Edinburgh.	Royal Society, Burlington House, Piccadilly, London, W.
University Library, Edinburgh.	Society of Antiquaries of London, Burlington House, Piccadilly, London, W.
Royal Society, Edinburgh.	Society for the Protection of Ancient Buildings, 10, Buckingham Street, Adelphi, London, W.C.
Royal Scottish Museum, Edinburgh.	Society for the Promotion of Hellenic Studies, London.
Society of Antiquities of Scotland, National Museum of Antiquities, Queen Street, Edinburgh.	Bodleian Library, Oxford.
Glasgow University Library, Glasgow.	Indian Institute, Oxford.
British Museum Library Great Russell Street, Bloomsbury, London, W.C.	
Folklore Society, 11, Old Square, Lincoln's Inn, London, W.C.	
India Office Library, London, S.W.	
Imperial Institute, London, S.W.	
Library of the Oriental Department of the British Museum, London, W.C.	

FRANCE.

Bibliothèque Nationale, Paris.	Institut Ethnographique International de Paris, 28, Rue Bonaparte, Paris.
Bibliothèque J. Doucet, 19, Rue Spontini, Paris.	Musée Guimet, 7, Place d'Iéna, Paris.
Directeur Général de l'Union Coloniale Française, 44, Chaussée d'Antin, Paris.	Revue Archéologique, 28, Rue Bonaparte, Paris.
L'Ecole spéciale des Langues Orientales Vivantes, Paris.	Société Asiatique, 1, Rue de Seine, Paris.
Institut de France, Paris.	Université de Lyons.

ITALY.

R. Biblioteca Nazionale, Centrale di Firenze, Italy.	Biblioteca Nazionale, Vittorio Emanuele, Rome.
Società Asiatica Italiana, Firenze, Italy.	British School at Rome, Palazzo Odescalchi, Piazza S.S. Apostoli, Rome.
American School of Classical Studies at Rome.	

HOLLAND.

Koninklijke Akademie van Wetenschappen
te Amsterdam, Holland. Koninklijk Instituut van Nederlandsch Indie,
The Hague, Holland.

RUSSIA.

Imperial Academy of Sciences (for the Asiatic Museum), Petrograd, Russia.

DENMARK.

National Museum, Copenhagen, Denmark. Royal Library, Copenhagen, Denmark.

BELGIUM.

Academie Royal d'Archeologie de Belgique, Anvers.

SWEDEN.

University Library, Upsala, Sweden.

NORWAY.

University Library, Christiania.

GREECE.

British School at Athens, Greece. La Société Archeologique d'Athènes, Athens.

JAPAN.

President, Asiatic Society of Japan, Tokio.

CHINA.

North China Branch of the Royal Asiatic Society, Shanghai.

AMERICA.

Field Museum of Natural History, Chicago, U.S.A.	American Philosophical Society, Philadelphia.
American Oriental Society, 235, Bishop Street, New Haven, Conn., U. S. A.;	Secretary, National Museum, Washington, U. S. A.
Free Library of Philadelphia, U. S. A.	Smithsonian Institution, Washington, D. C., U. S. A.

SIAM.

Vajiravudh National Library, Bangkok.

BRITISH COLONIES.

Royal Asiatic Society, Ceylon Branch, Colombo.	Literary and Historical Society, Quebec, Canada.
The Museum, Canterbury, New Zealand.	University Library, Sydney, New South Wales.
Melbourne Library, Melbourne, Australia.	Straits Branch, Royal Asiatic Society, Singapore.
Victoria Public Library, Perth, Western Australia.	

FOREIGN COLONIES.

Bataviaansch Genootschap van Kunsten en Wetenschappen, Batavia.	L'Ecole Francaise d'Extreme Orient, Hanoi, Indo-Chine.
L'Institut Francais d'Archéologie Orientale de Cairo, Cairo, Egypt.	Ethnological Survey for the Philippine Islands, Department of Interior, Manila.
Museum of Arabic Art, Cairo, Egypt.	

II.—INDIA.

(1) IMPERIAL.

Central Library, Army Headquarters, Simla.	Imperial Library, Calcutta.
Department of Education Library, Delhi.	Indian Museum, Calcutta.

(2) PROVINCIAL.

MADRAS.

The Government College, Kumbakonam.	Noble College, Masulipatam.
Christian College Library, Madras.	The Sanskrit College, Mylapore.
Government Central Museum, Madras.	The Government College, Rajahmundry.
Pachaiyappa's College, Madras.	The Teachers' College, Saidapet, Chingleput District.
Presidency College, Madras.	St. Joseph's College, Trichinopoly.
Public Library, Madras.	S. P. G. College, ".
School of Art, Madras.	Maharajah's College, Tirvandrum.
Secretariat Library, Fort St. George.	The Sanskrit College, Tiruvadi.
University Library, Madras.	Maharajah's College, Vizianagram.
St. Aloysius College, Mangalore.	

BOMBAY.

Gujarat College, Ahmedabad.	School of Art, Bombay.
Bombay Branch of the Royal Asiatic Society, Town Hall, Bombay.	University Library, Bombay.
Elphinstone College, Bombay.	Wilson College, Bombay.
Prince of Wales Museum, Bombay.	The College of Science, Poona.
St. Xavier's College, Bombay.	Deccan College, Poona.
Secretariat Library, Bombay.	Fergusson College, Poona.

BENGAL.

Wealeyian Mission College, Bankura.	Chaitanya Library, 4-1, Beaton Street, Calcutta.
Barisal Public Library, Barisal.	Church Mission Society, Calcutta.
Burdwan Raj Public Library, Burdwan.	Economic Museum, Calcutta.
Asiatic Society of Bengal, 57, Park Street, Calcutta.	Editor, Bengal Past and Present, Kidderpore Vicarage, Calcutta.
Bangabasi College, Calcutta.	Goethals' Indian Library, 30, Park Street, Calcutta.
Bengal Chamber of Commerce, Calcutta.	Government School of Art, Calcutta.
Bangiya Sahitya Parishad Sabha, Calcutta.	Library of the United Service Club, Calcutta.
Bethune College, Calcutta.	L. M. S. College, Bhowanipur, Calcutta.
Calcutta Historical Society, Calcutta.	Mahabodhi Society, Baniapuker Lane, Calcutta.
Calcutta University Institute, College Square, Calcutta.	Dacca College.
Metropolitan Institution, Calcutta.	Northbrook Hall Library, Dacca.
Presidency College Library, 1, College Square, Calcutta.	Provincial Library, Dacca.
Sanskrit College Library, 1, College Square, Calcutta.	Jagannath College, Dacca.
Scottish Churches College, Calcutta.	Krishnagar College, Krishnagar.
Secretariat Library, Writers' Buildings, Calcutta.	Daulatpur Hindu Academy, Khulna.
	Midnapur College, Midnapur.

BENGAL—*contd.*

University Library, The Senate House, Calcutta.	Narail Victoria College, Narail.
Hooghly College, Chinsura.	Rajshahi College, Rajshahi.
Chittagong College.	Varendra Research Society, Rajshahi.
Beer Chandra Public Library at Comilla.	Serampore College, Serampore.

BIHAR AND ORISSA.

Bihar National College, Bankipore.	Patna College, Bankipore.
Bihar and Orissa Secretariat Library.	Ravenshaw College, Cuttack.
Bihar School of Engineering, Bankipore.	St. Columba's College, Hazaribagh.

UNITED PROVINCES.

Agra College, Agra.	Carmichael Library, Benares.
Palace Library of the Most Revd. the Archbishop at Agra.	Central Hindu College, Benares.
St. John's College, Agra.	Queen's College, Benares.
Lyall Library, Aligarh.	Sanskrit College, Benares.
M. A. O. College Library, Aligarh.	Christ's Church College, Cawnpore.
Christian College, Allahabad.	Fyzabad Museum, Fyzabad.
Muir Central College, Allahabad.	Canning College, Lucknow.
Panini Office, Allahabad.	Provincial Museum Library, Lucknow.
Public Library, Allahabad.	Public Library, Lucknow.
Secretariat Library, Public Works Department, Allahabad.	Lyall Library, Meerut.
University Library, Allahabad.	Archaeological Museum, Muttra.

PUNJAB.

Khalsa College, Amritsar.	Islamia College, Lahore.
Aitchison College, Lahore.	Museum Library, Lahore.
Central Training College, Lahore.	Punjab Historical Society, Lahore.
Dyal Singh College, Lahore.	Punjab Public Library, Lahore.
Dayanand Anglo-Vedic College, Lahore.	Secretariat Library, Public Works Department, Lahore.
Forman Christian College, Lahore.	University Library, Lahore.

DELHI.

The Museum of Archaeology, Delhi.	St. Stephan's College, Delhi.
Public Library, Delhi.	

NORTH-WEST FRONTIER PROVINCE.

Peshawar Museum, Peshawar.	Secretariat Library, Peshawar.
----------------------------	--------------------------------

▼

BURMA.

Myanma Awba Club, Kyaiklat, Pyapon District.	Cedi Yengana Association Library, Shwe Dagon Pagoda, Rangoon.
Mandalay Public Library, Mandalay.	Phayre Museum, Rangoon.
Buddhist Library, Nathinggyaung, Bassein District.	Rangoon College, Rangoon.
Buddhist Propaganda Society, Pegu.	Rangoon Literary Society, Rangoon.
Young Men's Buddhist Association, Pegu.	Secretariat Library, Rangoon.
Baptist College, Rangoon.	Soolay Pagoda Library, Rangoon.
Bernard Free Library, Rangoon.	Teachers' Institute, Rangoon.
Burma Research Society, Rangoon.	Young Men's Buddhist Association, Rangoon.
	Office of Trustees of the Shwe Dagon Pagoda, Rangoon.

ASSAM.

Cotton Library, Dhubri.	Government Library, Shillong.
Cotton College, Gauhati.	Secretariat Library, Shillong.
Curzon Hall Library, Gauhati.	Victoria Jubilee Library, Tezpur.

CENTRAL PROVINCES.

Public Library of Amracti Town.	Morris College, Nagpur.
High School Committee, Balaghat.	Museum Library, Nagpur.
Government College, Jubbulpore.	Secretariat Library, Nagpur.
Training College, Jubbulpore.	Victoria Technical Institute Library, Nagpur.
Jagannath High School, Mandla.	Public Library, Saugor.
Hislop College, Nagpur.	Victoria Library, Seoni.

COORG.

The Chief Commissioner of Coorg's Library, Bangalore.

(3) NATIVE STATES.

Mysore.

Central College, Bangalore.	Maharaja's College, Myaore.
Indian Institute of Science, Bangalore.	

Hyderabad.

The Resident's Library, Hyderabad.

Gwalior.

Gwalior Durbar Library, Gwalior.

Central India.

Dhar Museum Library, Dhar.	Office of the Public Works Secretary to the Agent to the Governor-General, Central India.
Library of the Agent to the Governor-General, Indore.	Rajkumar College, Indore.

Rajputana.

College Library, Ajmer.
Rajputana Museum, Ajmer.

Library of the Chief Commissioner and Agent
to the Governor-General, Ajmer.

Baroda.

Library of the Resident at Baroda.

Baroda Museum.

Kathiawar.

Sir Bhagwatsingji Library,
(Kathiawar).

Gondal

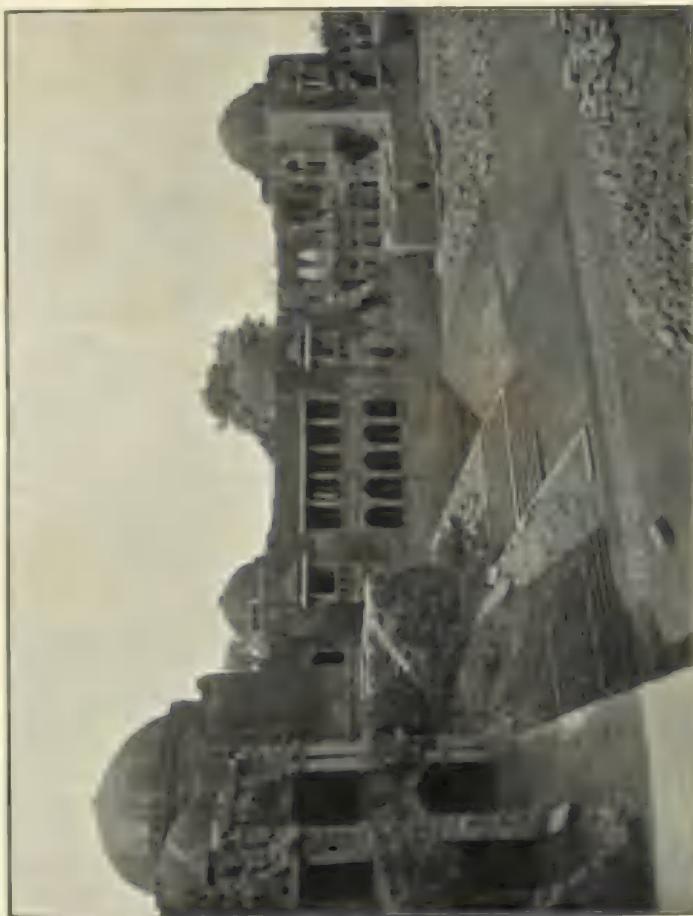
Watson Museum of Antiquities, Rajkot.

Chamba.

Bhuri Singh Museum, Chamba.

Travancore.

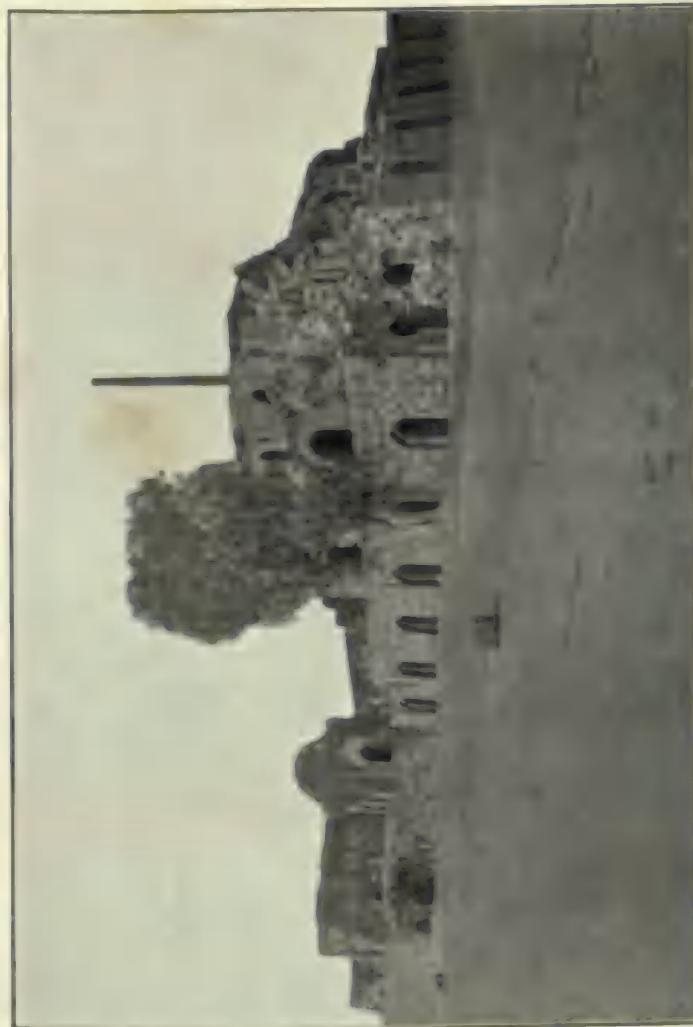
Travancore Durbar Library.



b. THE HAUZ KHAS, DELHI: DURING EXCAVATION OF STEPS.



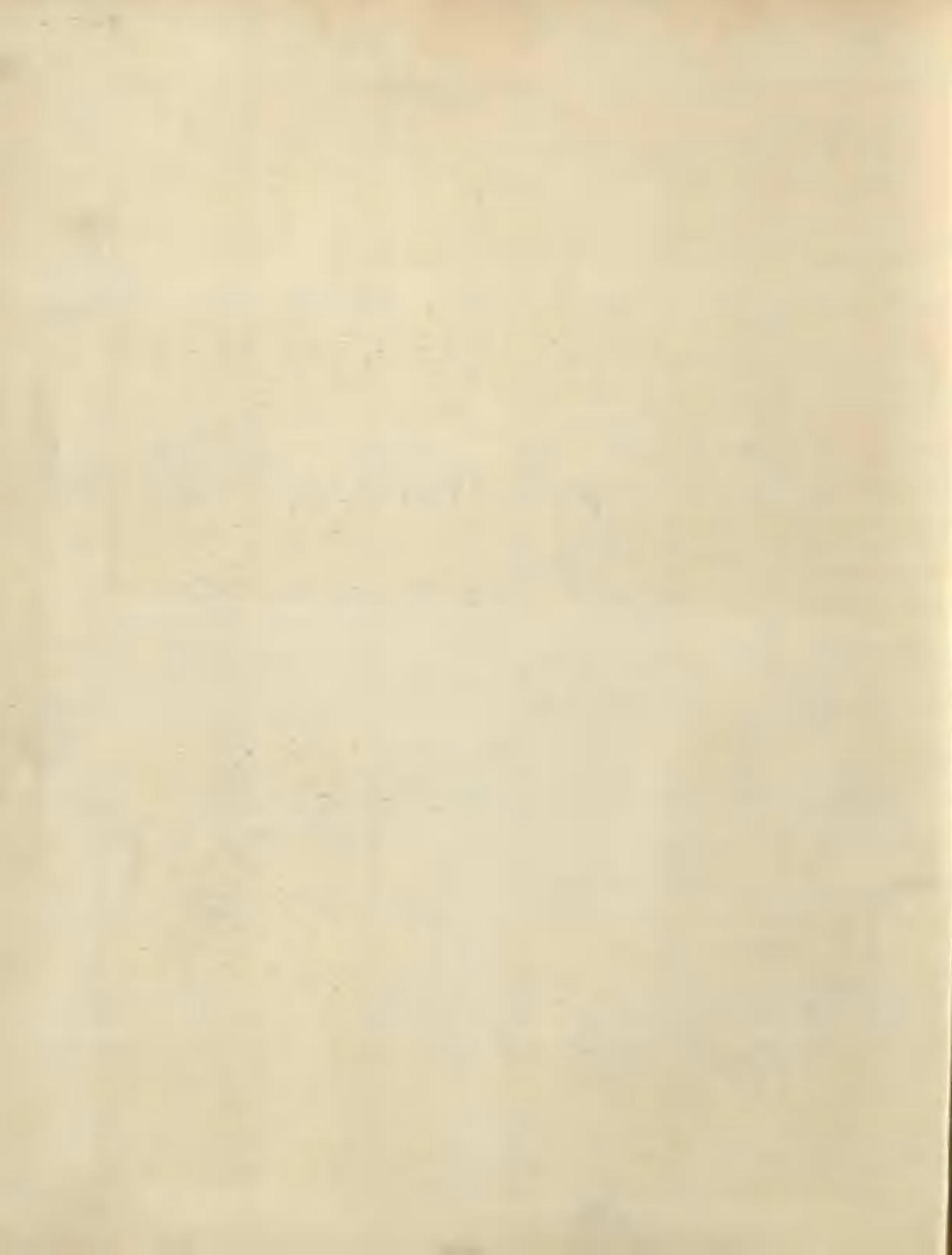
d. APPROACH TO HUMAYUN'S TOMB WITH ARAB-SARAI GATEWAY ON THE RIGHT.



a. ASOKA COLUMN AT FIROZ-SHAH'S KOTLA, DELHI.



c. MOSQUE AT FIROZ-SHAH'S KOTLA, DELHI.





a. BHALAR TOPE FROM S.-W. AFTER REPAIR.



b. DEOGARH : KURAIYA BIR TEMPLE BEFORE REPAIR.

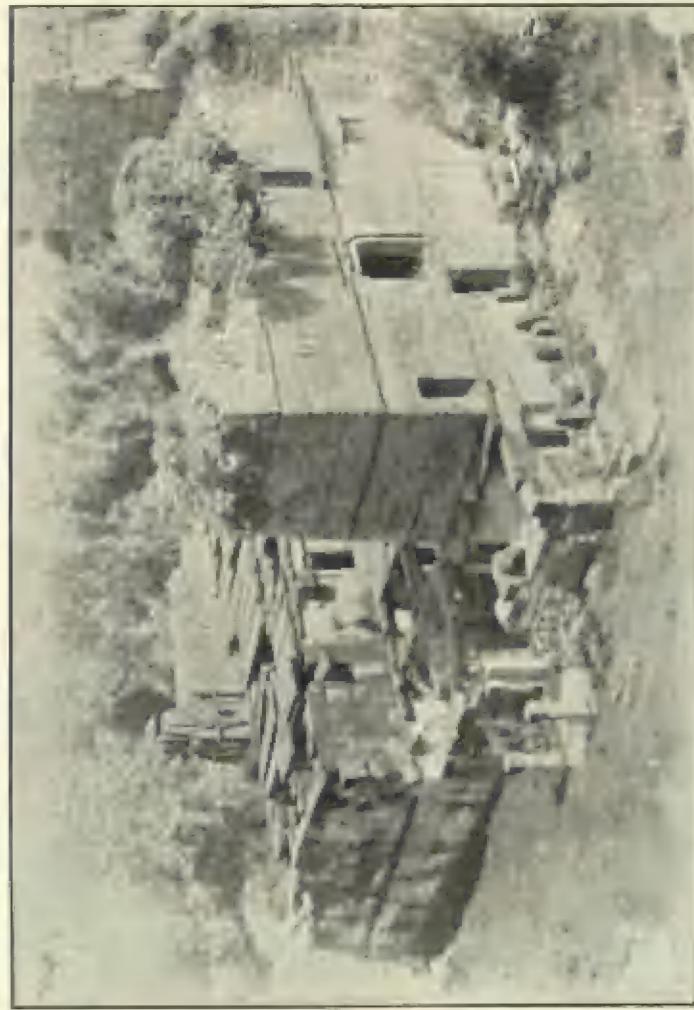


c. SIMHANADA LOKESSVARA FROM MAHOB.





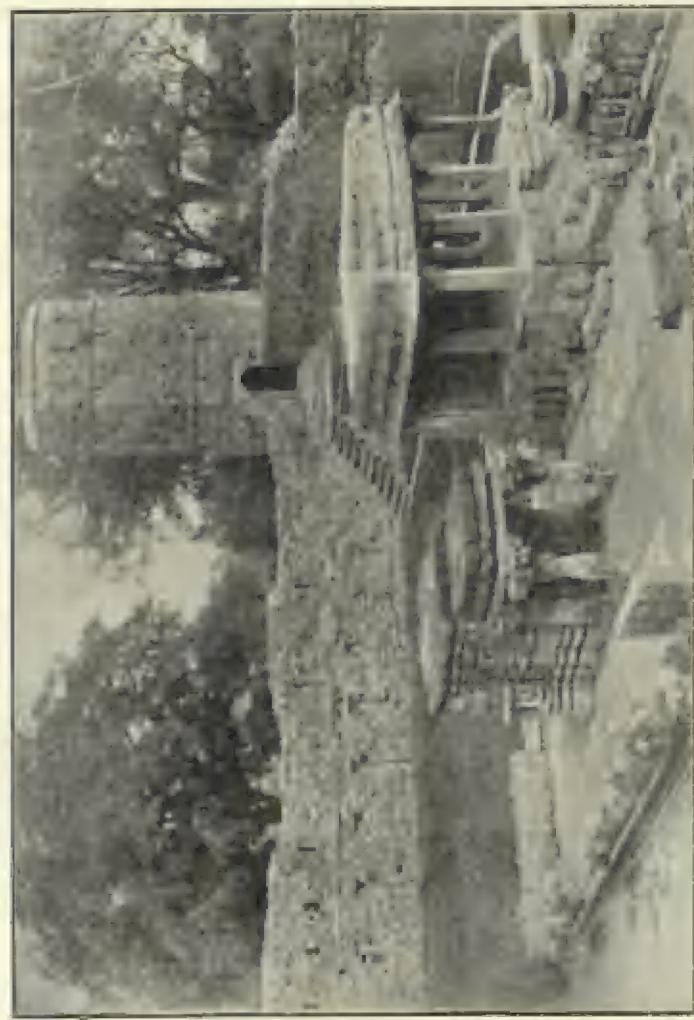
b. TEMPLE I, AT SURWAYA, AFTER CONSERVATION.



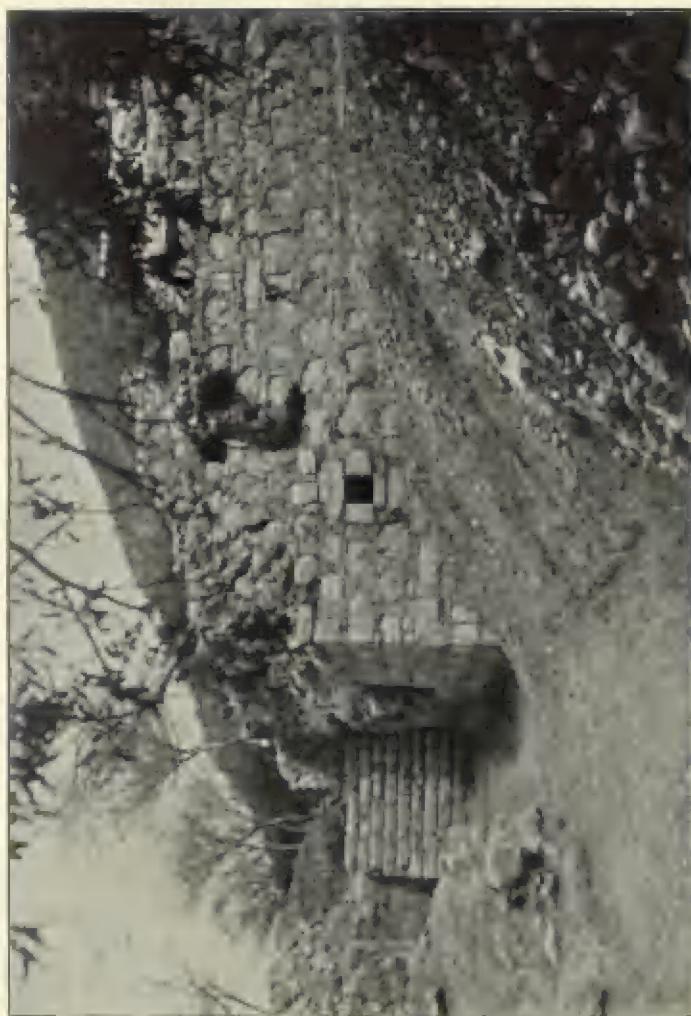
d. HSIAO MONASTERY AT SURWAYA, BEFORE CONSERVATION.



a. TEMPLE I, AT SURWAYA, BEFORE CONSERVATION.



c. TEMPLE II, AT SURWAYA, AFTER CONSERVATION.



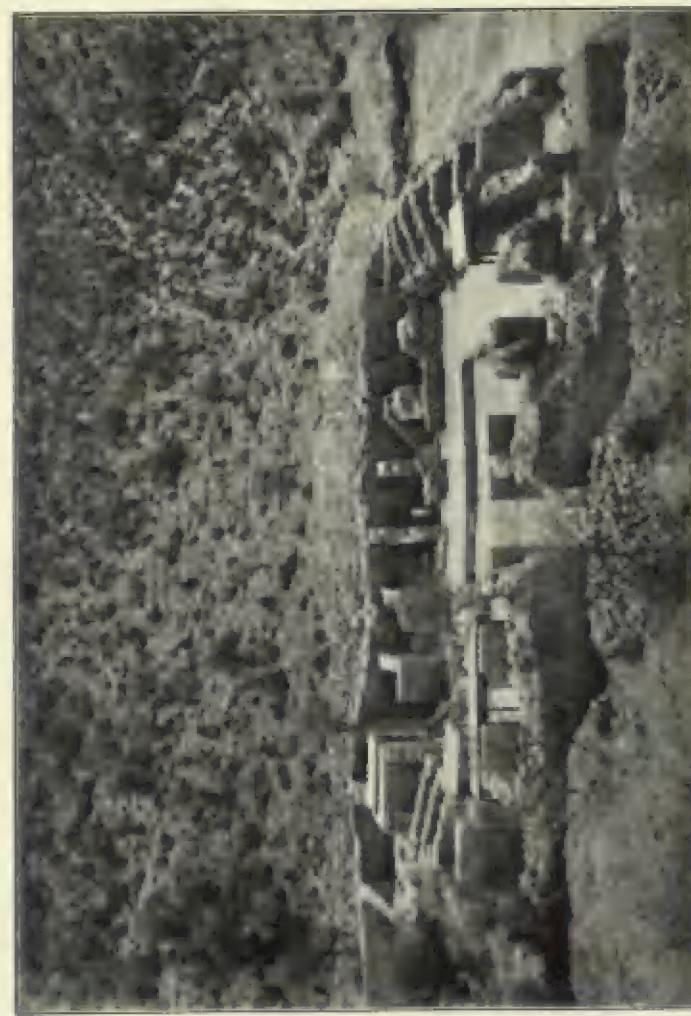
b. MORA MONASTERY : MONASTERY AFTER EXCAVATION, FROM WEST.



d. PRINASADHESVARA : RELIEF OF BUDDHA'S NATIVITY.



a. MORA MONASTERY : STUCCO RELIEFS ON SOUTH SIDE OF MAIN STUPA.



c. MORA MONASTERY : MONASTERY AFTER EXCAVATION, FROM SOUTH.



a. MORA MORADU: TERRACOTTA BUDDHA FROM MONASTERY.



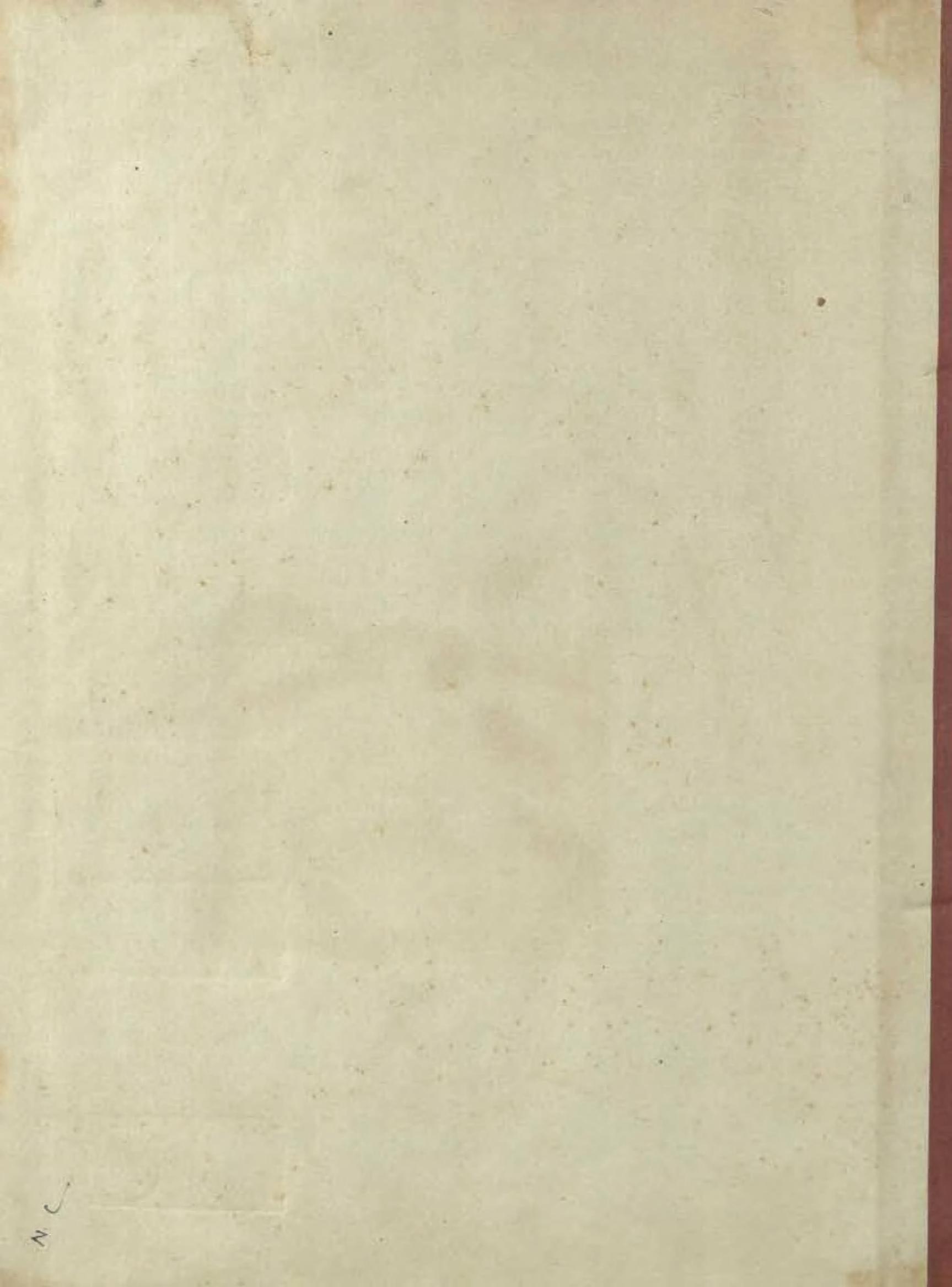
b. MORA MORADU: VOTIVE STUPA IN MONASTERY.

c. MATHURA: RAILING
PILLAR FROM
KANKALI TILA WELL.

d. MATHURA: INSCRIBED STONE-BOWL FROM PALI KHERA TILA.

e. MATHURA: RAILING
PILLAR FROM GOSNA TILA.

{



Central Archaeological Library,
NEW DELHI. 21725

Call No. R 913.02/ I. 2. 8/Am

Author—India. Department of
Archaeological

Title—Annual Report of the

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT. OF INDIA
Department of Archaeology
NEW DELHI.

Please help us to keep the book
clean and moving.

S. S. 149. N. DELHI.